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Technosexuality: Technology, Sexuality, and Convergence

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ABSTRACT

Convergence refers to a phenomenon where multiple communication technologies are integrated into a single device. Technosexuality proposes a convergence between sexuality as a social phenomenon and technologically mediated modes of interpersonal communication and sexual information consumption. The findings of this study indicate that though there is not a complete convergence between technology and sexuality, there nonetheless exists a relationship between the two constructs. Consistent with extant literature about computer-mediated sexuality, the technosexual behaviors in this study were organized primarily by arousal type; however, subsequent degrees of classification suggest that technology also plays a decisive role in the ways in which behaviors are adopted and enacted. This study also focuses on same-gender sexuality as it relates to expressions of technosexuality as well as the ways in which same-gender sexual identity, behavior, and desire are classically operationalized and empirically measured. Findings suggest that though queer persons—and gay, queer, and bisexual men in particular—participate in technosexual behaviors more frequently than their straight counterparts, same-gender sexuality has an indirect effect on technosexual participation and is mediated by primarily by the construct of deviance.

TECHNOSEXUALITY:
TECHNOLOGY, SEXUALITY, AND CONVERGENCE

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CHAPTER 1: WE TECHNOSEXUALS

Technology plays an increasingly important role in our everyday lives. Recent reports from the Pew Internet and American Life Project show that device ownership is not only up (Zickuhr, 2011), but also that the social lives of most Westerners are now deeply embedded in technology (Rainie, Smith, & Purcell, 2011). Digital social media are now a part of more than 600 million people's lives, and this number is speculated to grow to possibly 1 billion in the next year (Sawers, 2011). The internet and social media are decisive tools in everything from politics and elections (Smith, 2011) to how people consume news (Pew, 2011) to how people communicate with one another (Lenhart, 2010). In short, technological convergence is changing the world as we know it.

Descriptive statistics about the effect technology is having on people's everyday lives are numerous. Yet largely absent from this conversation is any discussion about the effect that new and convergent technologies have on sexual behavior. There are, of course, some exceptions to this statement. Numerous recent studies showcase the number of teenagers engaged in sexting, a behavior whereby people exchange in sending and receiving sexually explicit photographs and videos (and one that apparently merits policing at any cost, even the legal indictment of minors who willingly photograph, send, and receive such materials; Pilkington, 2009). Yet aside from the sparsely published warning narratives on the dangers of sexting, there is relatively little available information about how technology is affecting sexual behavior. If it's assumed that technology is taking on an increasingly fundamental role in the lives of hundreds of millions—if not billions—of people, then it is only logical to assume that, by extension, all aspects of our lives are being affected by this shift, including the sexual.

This assumption appears to be supported anecdotally. The relationship between the internet and pornography, for instance, is already well established (in fact, in the few seconds it's taken you to read this sentence more than 90,000 internet users have viewed pornography in some form or another; Rovou, 2007). Internet dating sites are now so popular that roughly one out of every five couples who married in 2010 met on an online dating site (Match.com & Chadwick Martin Bailey, 2010). A recent report showed that a majority of young adults aged 20 to 26 have engaged in sexting at some point in their lives (Wayne, 2009), and the proliferation of web-enabled, mobile smartphone devices has witnessed the growth in popularity of geo-social networking applications such as Grindr—a gay cruising app with over 700,000 users—combine Global Positioning System software, mobility, and social networking (Grindr.com, 2010).

If technology is indeed altering the sexual on a fundamental level—and it appears to be doing just this—it is prudent to think about the ways in which these changes are transpiring. On an individual level, changes in technology offer the chance for increased participation in virtual social lives. Everything from friendships to sexual relationships can now be managed with little more than some imagination and a smartphone; participation is at the fingertips of those who seek it. With information more accessible than ever, there also exists the invitation to seek out, to question, and to explore. It is well established that the internet serves as a space for self-exploration, identification, and validation. Mobile, web-enabled devices merely expand the traditional boundaries of this space, transporting it with us wherever we go.

If technology alters our lives on an individual level, then changes must be occurring on a macro-level as well. The fact that technology is becoming a staple in

peoples' sexual lives says as much about us as a society as it does about us as individuals. The nuances of this relationship cannot go unaddressed. In brief, they are rooted in the tenets of modernity, a culture of production and consumption, and the social self. Although there is considerable overlap among these three constructs, each also uniquely informs the relationship between technology use and society. To understand this relationship is to understand that technosexual behaviors (i.e., sexual behaviors that are mediated via new and convergent technologies) are occurring at a specific cultural and historic moment. The future frequency of such behaviors depends on many variables, just as they are presently informed by numerous historical, psychological, and sociological antecedents.

Culture, Technology, and Social Mores

Hall (1996) observes that modernity—a phenomenon chiefly associated with the West and the industrialization of nations—is informed by four major processes: the political, the economic, the cultural, and the social (p. 7). While each of these processes (and the multifaceted, complex ways in which they interact) is significant where modernity and technology are concerned, the cultural and the social especially inform this study. In particular, modernity's new social order—defined by dynamic social hierarchies, the sexual division of labor, and patriarchal relations between men and women—privileges technology use and adaptation by such demographic measures as gender, race, and class. Furthermore, the materialistic and individualistic culture promoted and endorsed by modernity has resulted not only in the use of technology (i.e., industry) to mass produce popular culture, but also promoted the affirmation of the self through the use of technological devices.

Popular culture has proliferated based on these very principles, and technology is fundamental in both the production and consumption of mass culture. Digital technologies such as smartphones, tablets, and even portable computing devices such as laptops are merely the latest iterations in a long history of consumer items intended for personalization, self-discovery, and individual introspection. As old technologies are replaced by newer ones, new possibilities for self-exploration, self-identification, and self-fulfillment (all rooted in the Fiske-ian notion that "I am what I consume") emerge. And the desire to consume and to exploit new technologies for these purposes persists.

The central motivation fueling the consumption of these technologies is the self: the socially-contextualized being defined in terms of identities, roles, and interactions (Westjohn, Arnold, Magnusson, Zdravkovic, & Zhou, 2009). Identity-related influences are already established predictors for engaging with new technologies (e.g., Nysveen, Pedersen, & Thorbjørnsen, 2005; Thorbjørnsen, Pedersen, & Nysveen, 2007), and as social capital is increasingly maintained via digital and mobile mechanisms, it's likely that such influences will only increase over time. New technologies generate new virtual spaces for self-affirmation, in-group identification, and self-expression, all of which are indispensible to the maintenance of the social self.

Thus, as technological advances offer new platforms for identity expression and negotiation, it is logical to assume that technologies are adopted, absorbed, and employed in different ways by different social groups. This is not to suggest, of course, that the behaviors of many are reducible to one, single identity category; on the contrary, it's generally accepted that social identities are multifaceted, contradicting, and complex. However this is also not to say that there's nothing to be garnered from considering how

a certain social group negotiates collective identity via technological platforms, spaces, and devices. The results of such an investigation have the potential to offer new insights about a given group's culture, institutions, norms, and organization.

This study proposes an analysis of technosexual behaviors through the lens of sexual identity. Broadly, sexual identity might be thought of as one's sexual sense of self in a culturally created identity category that accounts for sexual desires and behaviors (Savin-Williams, 1995). Notably, this study does not reduce sexual identity to a mere term of self-identification, but instead, relying on existing studies and literature, expands how this concept is measured and defined. In broadening this measurement, this study will hopefully be able to better address the complex social nature and intricate cultural production of sexual identity.

The remaining question is, of course, why sexual identity? In truth, there is no one satisfactory answer to this question; therefore, I offer you several: First, sexual minorities have always shared a unique relationship with technology. This assertion has been supported both anecdotally and empirically. In many ways, modern queer culture is a product of technological circumstances and mediated environments. From subcultural practices built around film (i.e., camp) to personal ads in print newspapers to weekly electronic political newsletters, the lesbian, gay, bisexual, and transgender (LGBT) community would look very different today if not for its historical entanglement with technology.

Second, technology is a key invitation for thinking about the current political and news landscapes surrounding the LGBT community. Technology is presently at the center of any number of issues facing sexual minorities, from the debates surrounding

such topics as gay marriage and employment non-discrimination acts to the It Gets Better campaign launched in the wake of a string of teen suicides to sexual identity disclosure in online social media. Thus, as the world becomes increasingly involved in technological pursuits, platforms, and experiences, so, too, does the world of the LGBT community.

Third, I admit a personal investment in this research. As a queer millennial who came of age in an internet-equipped household, technology was instrumental (and continues to be instrumental) in my own sexual development and pursuit of self. Studies of queer millennials continue to reveal the importance that technology plays in socialization, identity exploration, and knowledge about sex (e.g., Hillier & Harrison, 2007). Thus, the findings of this research have the potential to inform future conversations about the role that technology will undoubtedly continue to play in sexual identity formation, negotiation, and development.

Finally, this study is not *just* about sexual identity. While this topic is its focus, this research offers numerous other subjects for consideration, including implications for racial groups, different socioeconomic classes, religious sects, and political affiliations. Bersani (1995) observes that "there are many ways of being gay, that sexual behavior is never only a question of sex, that it is embedded in all the other, nonsexual ways in which we are socially and culturally positioned" (p. 3). This study will examine sexual identity in context with these other social and cultural positions. This social contextualization allows for a more thorough analysis of the relationship between techno-sexual behaviors and sexual identity. Moving forward, it is my hope that the findings of this study will continue to problematize sexual identity, how we understand ourselves and one another as sexual beings, and how we think about the convergence of sex and technology.

Before beginning this task, however, it is first necessary to define what is meant by sexual identity. As demonstrated in the following chapter, defining this term is problematic for several reasons. It means different things to different people. For example, how does a man who sleeps with other men for money but self-identifies as straight understand his sexual identity? What about a woman who is married to man but is sexually aroused by the thought of sex with another woman? Also, self-identification is only one way for thinking about sexuality. As clear from the previous examples, behavior and identity can often times complicate sexual identity, which is neither completely fixed nor stable (though much of the contemporary culture, particularly that which promotes essentialism, would have you believe otherwise). Thus, it is obvious that sexual identity is no simple matter, and, as it is such, it merits consideration from a number of different angles.

Chapter 2 defines the words and terms we commonly use to talk about sexual identity before discussing how to account for those behaviors, thoughts, attractions, and desires that disrupt the popular myth of sexuality as reducible to an absolute identity category. Next, the chapter proposes some empirical points of consideration for thinking about those attitudes, motivations, and behaviors that might influence technosexual participation.

Chapter 3 presents a detailed layout of this study's methodology, including the study design, sampling frame, and operational definitions. Chapters 4 and 5 showcase this study's main findings. Those results related primarily to same-gender sexuality are detailed in Chapter 4, while those results focusing specifically on technosexuality are

featured in Chapter 5. Finally, Chapter 6 offers a discussion of the limitations of this study as well as the implications of these findings for future research.

External Validity

Before going any further, the generalizability of this study must be addressed. The data in this study are generated from both probability and purposeful (i.e., non-probability) samples. Thus, the conclusions drawn here, based primarily on empirical structural models, are not intended to be causal but rather descriptive. Since the construct of technosexuality is a relatively new idea, much of this work is exploratory and, therefore, cannot and should not be situated in a model of cause and effect. Instead, this study is interested in empirical relationships, associations, and patterns. Findings, thus, are not meant to be interpreted as absolute claims about any individual or community; rather, this study is meant to serve as a foray into technologically mediated sexual behaviors, including the characteristics of individuals who are most likely to participate in them and why.

CHAPTER 2: LITERATURE REVIEW

This chapter defines the study's fundamental constructs. After introducing and explaining these constructs, technology and sexuality are conceptually linked. Research questions and hypotheses are stated throughout the chapter in order to gauge how the relationship between sexuality and technosexual behaviors will be tested.

Sexuality

The term "sexuality" is multidimensional, referring to a broad range of erotic feelings, behaviors, experiences, and desires that are informed by a variety of economic, social, and political discourses (e.g., Foucault, 1978; Weeks, 2010, p. 18). Though sexuality is commonly thought of as something biologically innate to the human condition, there exists ample evidence to support the claim that modern sexuality is at least in part socially constructed (Weeks, 2010). What exactly does this mean? In short, the social construction of sexuality refers to the idea that sexuality is a social institution composed of a complex network of phenomena (i.e., terms, artifacts, practices, behaviors, etc.) that are systematically organized, understood, and acted upon by cultural forces such as norms, values, beliefs, and ideologies (e.g., Seidman, 2009). The social construction of sexuality includes the idea certain sexual behaviors are socially acceptable while others are considered taboo.

Given the expansive nature of sexuality, any empirical study of it cannot hope to investigate it in its entirety; rather, the study of sexuality requires concentration on specific elements, which can then seek to offer insight about sexuality as a social phenomenon. This study, therefore, focuses on two principal aspects of sexuality: First, this study is concerned with sexual behaviors, specifically those acts, whether individual

or involving one or more other persons, that are (1) voluntary for all persons involved and that (2) include "genital contact and sexual excitement or arousal even if intercourse or an orgasm [does] not occur" (Laumann, Gagnon, Michael, & Michaels, 1994, p. 67). Second, this study concentrates on sexual identity, with particular attention given to same-gender sexuality. Same-gender sexuality refers to a subgroup of sexuality that is composed of same-gender sexual experiences, desires, and attractions as well as those terms and labels that might be used to describe individuals who participate in the subculture.

Before delving more deeply into each of these areas, it is prudent to discuss this study's preferential use of the phrase same-gender sexuality rather than same-sex sexuality. Though the phrase "same-sex" has become unquestionably favored in both popular and academic spheres, I reject the use of it and elect to use the term "gender" in its place. My cue for doing so initially came for Laumann, Gagnon, Michael, and Michaels' *The Social Organization of Sexuality* (1994), in which the researchers employ the phrase "same-gender sexuality" rather than "same-sex sexuality." Though their preference for this phrase is never articulated, it is clear that this phrase was indeed a better reflection of the study's institutional pedigree and ultimate goals. By using gender instead of sex, the researchers cleverly remind us that their study of sexuality is a study of the ways in which it is socially constructed.

Thus, gender is more fitting than sex because while sex refers to a biological "determination made through the application of socially agreed upon … criteria for classifying persons as male or female," gender is "the activity of managing situated conduct in light of normative conceptions of attitudes and activities appropriate for one's

sex category" (West & Zimmerman, 1987, p. 127). In other words, gender is the social performance of masculinity and femininity, which are, by extension, an enactment of sex. Since sex and gender are often and erroneously used interchangeably, this study is also an investigation of the degree to which these terms correlate as well as the space that is afforded to those individuals for whom they do not align. This also presents unique issues for empirically studying those individuals whose gender identity and assigned sex do not correspond as well as those individuals who claim a gender identity outside the male-female gender binary. Thinking about the relationship between sex and gender is especially relevant when considering sexual identity, as gender and sexuality are conceptually linked constructs (Shively & De Cecco, 1977).

Sexual Behaviors

Generally, sexual behaviors might be thought of as an expression of sexuality. A wide range of behaviors exist that could be labeled sexual or as having to do with the expression of sexuality. For example, abstinence, bestiality, sadomasochism, and masturbation are all different expressions of sexual behavior. Yet behaviors such as rape, pedophilia, and bugchasing are also forms of sexual behavior. While each of these terms is an expression of sexuality, they have little else in common (aside from the fact that some may seem equally deviant by society's standards). As previously stated, this study is concerned with instances of sexual behavior that occurred with the voluntary consent of all those individuals involved in the act. Therefore, instances of sexual expression involving extreme coercion, unanticipated violence, force, or abuse are not taken into account in this study.

Furthermore, this study is focused on sexual behaviors that are in some way technologically mediated. This may refer to cybersex with an unknown partner, camera-based video sex with a significant other, or the use of websites and smartphone applications designed to search for future sexual partners. Technosexual behaviors such as these are the focus of this study and, thus, are considered at length throughout it. Since the nature of this research is exploratory, this study will inevitably not be able to account for the wide range of technosexual behaviors that empirically exist. For that reason, then, many of the technosexual behaviors investigated throughout this study are derived from current cultural conversations and research (empirical or otherwise) about the convergence of sexuality and technology.

Sexual Identity

Sexual identity can be defined as "the enduring sense of oneself as a sexual being which fits a culturally created category and accounts for one's sexual fantasies, attraction, and behaviors" (Savin-Williams 1995, p. 166). It is related to, though distinguishable from, sexual orientation and sexual behavior (American Psychological Association, 2008). Though sexual orientation and sexual identity are frequently used interchangeably, in this study I assume that sexual orientation refers to sexual desires, attractions, and fantasies, and that sexual identity refers to an individual's conception of a sexual self, which includes both behaviors and desires (e.g., Reiter, 1989). The idea of a sexual self is relatively new, with contemporary terms for sexual identity having existed only since the mid-nineteenth century and subcultures related to those terms having only existed for roughly 100 years (e.g., Katz, 2007; Chauncey, 1995). While same-gender desires and behaviors certainly predate modern theoretical and lingual constructions of sexual

identities, it is the terms around which the modern subculture was gestated, born, and continues to develop today. Thus, this study begins its examination of sexual identity with those words and terms that people use (and by use I mean speak and write, whisper and think, codify and act upon) to identify themselves and others who harbor, disclose, or pursue same-gender desires. These words, then, act as signifiers for some real-life referent; linguistically, therefore, we regard these terms as conceptualizations of the self as inherently sexual and as fitting into a culturally constructed category that accounts for sexual desires and behaviors.

Identification. One way to think about sexual identity is to consider those terms that people use to self-identify and label others. Such terms include *homosexual*, *heterosexual*, *gay*, *lesbian*, *bisexual*, *straight* and *queer*. These terms are often used interchangeably, in spite of the fact that each them has a different connotation. These differences, subtle though they may be, are highlighted here. Following an explanation of these terms, this chapter then turns towards other considerations of sexual identity.

The term *homosexuality* was first used in 1869 by Karl Maria Kertbeny in an open letter to the German minister of justice about the drafting of a new penal code for the North German Confederation (Mondimore, 1996). A debate had arisen about whether the new state—formed from the states of northern Germany and the Kingdom of Prussia—should retain a section of the Prussian criminal code that made same gender sexual contact a crime. The term, originally printed in German, was not translated into English until 1892, when Charles Gilbert Chaddock translated *Psychopathia Sexualis* (first published in 1886), a medical textbook of sexual deviance and pathology authored by Richard von Krafft-Ebing, from German. Thus, the term homosexual has its roots in

medical literature as an illustration of sexual inversion, a field of medical pathology that, in the late nineteenth century, focused on deviant gender behavior (Chauncey, 1982-83).

Homosexuality, thus, references a person who sexually desires a person of the same gender. As a concept, it collapses the categories of gender identity and sexual identity, rendering them indivisible. This act greatly affected norms and expectations related to gender: men were expected to act masculine and women were expected to act feminine—both highly fabricated cultural constructions of gender. While challenges to this coupling exist throughout the twentieth century (e.g., Ellis, 1927), it is not until the later part of the century that gender identity and sexual identity are parsed as theoretically distinct, though undoubtedly related, concepts (e.g., Butler, 1990; Rubin, 1984; Sedgwick, 1990).

Given its clinical origins and inherent gender implications, it is logical to assume that the term homosexual may not be popular among those who it purports to describe. Though there is scant research dealing with this topic, studies exist generally support this claim. For instance, in a survey of 99 gay men and lesbian women, Donovan (1992) found that respondents were more likely to associate the term homosexual with negative attitudes and the word gay with positive attitudes. The researcher concludes that the use of the term homosexual might suggest an “archaic” or “negative” attitude to self-identified lesbian and gay respondents (p. 35). While some respondents said that the use of the term was acceptable for formal and scientific writing, the researcher ultimately concludes, citing June Reinisch of the Kinsey Institute, that research should be conducted in the vernacular of the group under surveillance (Donovan, 1992; Weiss, 1989).

Thus, in spite of its still common use in formal writing, this study will rely on the terms gay and lesbian rather than homosexual. Of course these terms are not without their own unique histories. Gay has been in use since at least the 1930s as slang for someone who self-identifies as having predominantly same-gender desires (see, for example, the *Oxford English Dictionary*). Similarly, lesbian has also been in use since at least this time, if not before. Harvey (2000) observes that terms such as gay and lesbian are rooted in the constructs of identity and community, both of which are important for considering how and why people with same-gender desires ultimately decide to self-identify as a sexual minority.

These terms operate as self-selecting identity categories for men and women who identify as having same-gender attractions or desires. Self-selecting is used purposefully here and requires a brief explanation. Though sexual identity is more complex than mere self-identification (i.e., it is clear that, in studying sexuality, one must also consider desire and behavior, two overlapping, though distinct, areas for thinking about sexuality and sexual identity), its importance cannot be underestimated (and the fact that it, alone, is not sufficient for studying the range and variance of sexual identities does not—and should not—preclude it from being considered an important measure of sexuality). Self-selecting, thus, refers to an individual's choice to adopt a sexual minority identity label. However, this is not to engage a debate on constructivism versus essentialism; rather, it is to emphasize that the adoption of a same-gender sexual identity label can occur independently of same-gender sexual desire or behavior.

The term bisexual refers to those people who harbor sexual attractions, feelings, or desire towards both men and women. Originally coined "psychic hermaphroditism"

(Paul, 2000, p. 13), this term has its roots in the same medical literature of the 19th century as the term homosexual. Rodríguez Rust (2000, p. 172) explains that while less than 1% of the general United States population identifies as bisexual, the percentage of people that identify as bisexual within the lesbian, gay, and bisexual community is as much as 20% for women and anywhere between 3% and 30% for men, depending on other variables such as age, race, and ethnicity. Thus, it becomes quite apparent from Rodríguez Rust's study (itself a meta-analysis of past studies) that bisexuals comprise a significant portion of the LGB community. While bisexuals have endured much of the same social and societal stigma as other sexual minorities, they are also in the unique position of being a sexual minority that has undergone criticism from other sexual minority groups (Rodríguez Rust, 2000, p. 5). Namely, gay and lesbian groups and researchers have routinely attacked bisexuality as a "transitory phenomenon," a "transitional state," and "a denial of one's fundamental homosexual orientation" (Paul, 2000, pp 11-12).

Thus, bisexuality exists at a specific cultural and social locus. It disrupts the sexual binary by introducing a host of possibilities that heterosexuality and homosexuality cannot conceptually account for. The *Kinsey Reports*—composed of *Sexual Behavior in the Human Male* (1948) and *Sexual Behavior in the Human Female* (1953)—is perhaps one of the best known modern commentaries on bisexuality, if not on sexuality in general. In these studies, Kinsey revolutionized sex research by measuring sexual identity on a 7-point scale (where one end of the scale represented a subject who was "exclusively heterosexual," and the other end represented someone who was "exclusively homosexual"), thereby expanding what was once thought of as categorical

into a continuum. While bisexuality problematizes a binary system of sexual identity, it also comes with its own set of assumptions, shortcomings, and complexities: notably, the term does not explain the full range of sexual identity variance, especially when considering such items as desire and behavior. Thus, although the term *bisexual* serves as an important identity marker, it also serves as a reminder that sexual identity cannot be fully explained by self-identification alone.

The history of the term heterosexual is just as uncertain as the history of other sexual identity labels. What is certain is that the term came into being at or around the same time as the term homosexual (Katz, 1995). Furthermore, much like the term homosexual, heterosexual was originally used in the nineteenth century as a medical term to describe a sexual perversion, used both to describe a person with attractions to both men and women as well as a person with a non-procreative lust for the opposite sex (Katz, 1995). By the 1920s, the term was in use in popular culture, beginning to appear in both newspapers and novels as an antonym to homosexual (Katz, 1995). The use of the term straight to describe heterosexual people can be traced back until at least the 1940s, when enclaves of gays and lesbians began to use the word to describe people who left the homosexual lifestyle to pursue a heterosexual one (Katz, 1995 citing Henry, 1941).[1] It is in these reactionary terms that we continue to situate and understand the terms heterosexuality and straight. In an abstract sense, thus, it is only in opposition to homosexuality that heterosexuality conceptually comes into existence.

Term adoption and identity politics. The existence of sexual minority subcultures relies upon members who self-identify as such. Though the debate between essentialism and constructivism disputes whether sexual minorities are born with an

[1] For example: “He’s gone straight.”

innate sexual predisposition or whether sexual identity is socially constructed, what is certain is that the process by which lesbian, gay, and bisexual individuals come to know and to understand their identities is deeply rooted in social rituals and cultural rites of passage. One such rite of passage is coming out: the process by which gay, lesbian, and bisexual people disclose their same-gender sexual attractions to themselves and others (Herdt, 1992). The symbolic act of coming out has helped to reify the importance of self-identification in terms of defining one's sexuality. It is not only an affirmation of shared sexual desires and attractions, but it also serves a political function of community building insofar as it symbolically inscribes the bodies of those who choose to self-identify with all the social codes and messages about what it means to be openly gay, lesbian, or bisexual.

The cultural mandate to come out in Western cultures, thus, also helps to reify sexual identity as a fixed identity category (this, as I later argue, is not always the case) similar to sex, race, and ethnicity. Though, in many ways, the empirical world supports this claim (i.e., we can measure sexual identity based on items of self-disclosure, and, in many ways, the broader culture demands data based on this claim in order to answer questions [e.g., How many are there? How much money do they earn? Where do they live?] fundamentally rooted in the idea that sexual identity is a stable identity category), this assumption is problematic for a number of reasons. Unlike other identity categories, sexual identity is neither immediately apparent (perhaps both to the subject as well as others) nor is it as fixed as rituals like coming out make it seem.

Furthermore, previous research has indicated that there are gender differences in sexual identification (Petersen & Hyde, 2011). For example, one study found that men

are more likely to identify as homosexual than bisexual, whereas women are more likely to identify as bisexual than homosexual (Mosher, Chandra, & Jones, 2005). Another found that gay and bisexual men reported feeling different from their heterosexual counterparts at a younger age than lesbian and bisexual women (Savin-Williams & Diamond, 2000).

Same-gender sexual behavior and desire. Self-identification alone reduces sexual identity to an imperfect empiricism. While the culture surrounding minority sexual identity categories incessantly supports and reifies the acts of self-disclosure and self-identification, it is apparent that sexual identity is more than the mere act of adopting a label. Thus, measurements of sexual identity cannot rely on self-identification alone; other areas of sexuality must also be factored into how this construct is operationalized. Kinsey (1948) was one of the first sex researchers to put these ideas into popular circulation, suggesting that sexual orientation is a continuum between exclusive opposite-gender attraction and exclusive same-gender attraction. Yet although sexual identity, sexual behavior, and sexual attraction are closely related constructs, they do not always perfectly correlate (Petersen & Hyde, 2011).

In an empirical study of sexuality in America, Laumann, Gagnon, Michael, and Michaels (1994) triangulate same-gender sexuality along the dimensions of sexual behavior, desire, and self-identification. This study expands the construct of sexual identity to include more than just self-identification. Furthermore, this study shows that though these dimensions of sexual identity are related and, in certain cases, overlapping, they are also empirically distinct. For example, the study shows that while 2.8% of men and 1.4% of women self-identified as gay, lesbian, or bisexual, over 4% of women and

9% of men reported having engaged in a sexual act with a person of the same gender. Additionally, the study concluded that 7.7% of men and 7.5% of women reported some form of same-gender sexual attraction or desire.

More recent studies have indicated similar findings. For instance, in a study of discordance between sexual behavior and self-reported sexual identity in New York City men ($N = 2898$), Pathela et al. (2006) found that 12.4% indicated sex with men and that of this 12.4%, 8.9% identified as straight, 3.3% identified as gay, and 0.2% identified as gay. Furthermore, the researchers found that men who had sex with men exclusively but identified as straight were "more likely than their gay-identified counterparts to belong to minority racial or ethnic groups, be foreign [non-U.S.] born, have lower education and income levels, and be married" (p. 416). Other research (e.g., Diamond, 2008) has highlighted the fluidity of sexual identity, documenting the ways in which attractions, desires, and identities may change across context and time (Peterson & Hyde, 2011, p. 158).

These findings greatly complicate the idea of sexual identity and suggest that sexual identity is not a stable identity category. Other studies have also substantiated this idea. For instance, Sell (1997), critiquing the measurement tools available to researchers for studying sexual orientation, describes two definitional components of sexual orientation. Namely, the researcher observes there is a psychological component, which includes sexual passions, urges, feelings, attractions, interests, desires, instincts, identity, and preference (p. 648) as well as a behavioral component, including genital activity, sexual contact, and sexual contact that achieves orgasm (p. 649).

A study of how adolescents think about their own sexual identities revealed that sexual attraction was a more important item than behavior or self-identification (Friedman et al., 2004). With respect to attraction, this study stresses the importance of physiological reactions versus cognitive responses. Though this distinction may seem particularly significant for adolescents, it also highlights the complexity of thinking about how to measure to sexual identity. In expanding measurements of sexual identity, thus, it is essential to not only consider what to measure (i.e., self-identification, behavior, attraction, etc.), but also how to measure it. Since, as evidenced here, there is no shortage of ways for thinking about sexual identity, it becomes the obligation of the researcher to measure sexual identity in ways that are both meaningful and exhaustive.

As demonstrated by previous research, there are a number of cases where respondents might report same-gender attractions or desires without claiming a lesbian, gay, or bisexual identity. Escoffier (2003), for example, writes about heterosexually identified males who appear in gay pornographic videos. In this instance, men who neither identify as gay or bisexual nor report feelings of same-gender desire engage in same-gender behavior in exchange for economic incentives. A report from the Williams Institute (2009), a think tank devoted to issues concerning sexual orientation and the law, observes that sexual identities that have been historically developed in "gay white contexts" (e.g., gay, lesbian, bisexual) can be less "culturally relevant among non-white groups" (p. 29). Serving as evidence of this realization is an entire subculture of men who have sex with men (MSM) but who do not necessarily self-identify as gay, queer, or homosexual.

The MSM population highlights the importance that other identity variables can play in the construction of sexual identity. In this case, the intersection between race and sexual identity results in the cultural production of the down low (DL), a cultural practice "which connotes any activity or concept meant to remain secretive or private" and has been used primarily by heterosexually identified, urban, African-American men who have sex with men but who do not identify as gay or bisexual (Heath & Goggin, 2009; Saleh & Operario, 2009, p. 391). Though the term's first associations with secretive sexual encounters occurred within the context of straight relationships (as referenced, for example, in the 1990s music of such R&B artists as TLC and R. Kelly), it was later appropriated by African-American MSM as a form of identification and self-understanding (Saleh & Operario, 2009).

Much of the previous research on DL-identified MSM centers on public health concerns, primarily the transmission of HIV as men on the DL are both less likely to have protected sex and to have been tested for sexually transmitted infections (Wolitski, Jones, Wasserman, & Smith, 2006). This type of research, though important, reveals little about why DL-identified MSM are reluctant to adopt sexual minority identity terms in spite of their same-gender relationships and desires. In a study of MSM, Brown (2005) identified homophobia, heterosexism, and the construction of black masculinity as chief reasons to explain why DL-identified African American men feel unable to identify with a gay or bisexual identity. This study reveals how the concept of sexual identity is quickly altered when other demographic variables such as race and gender are introduced.

Given this finding, it is, by extension, prudent to consider how other races negotiate the terms of sexual identity. Writing about sexuality measurements among

Latino and Asian Americans, Chae and Ayala (2009) observe that the incidence of lesbian, gay, and bisexual self-identification differs from that of white Americans. Specifically, the researchers observe that U.S.-born Asian sexual minorities were more likely to report an LGB identity than those who were foreign born. Also, Chinese participants were more likely than those of other ancestries to self-identify as LGB, and Asian men were more likely than Asian women to self-identify as a sexual minority. Similarly, U.S.-born Latino sexual minorities were likely to self-identify as LGB than those who were foreign born. Also, Latino men were more likely than Latino women to self-identify as a sexual minority, and participants of Mexican ancestry were less likely to identify as LGB when compared to those of other Latino ancestries.

Gender also factors into same-gender sexual attractions and behaviors. Bisexual and lesbian women, for instance, are more likely to report an emotional attraction to women before a physical one, whereas men are more likely to report a physical same-gender sexual attraction before an emotional one (Petersen & Hyde, 2011, citing Wienberg, Williams, & Pryor, 1994). Concerning sexual behaviors, men are more likely than women to indicate both same-gender sexual attractions and behaviors, whereas women are more likely to report same-gender sexual attractions but do not act on them (Petersen & Hyde, 2011, citing Weinberg et al., 1994).

Sexual scripts. From a sociological perspective, the theory of sexual scripts might also, in part, explain the process by which subjects come to understand and actively construct their sexual identities. The theory of sexual scripts states that the sexual derives its meanings from the social (Simon & Gagnon, 2003) and that sexuality is learned from culturally available messages about sex, gender, and sexual situations (Frith

& Kitzinger, 2001). Self-identification through this lens, therefore, is less the result of anything innate and more the result of constructivist determinism. In other words, these sexual identity categories exist, and continue to exist, on account of the fact that people with particular desires and attractions assent to them. Sexual scripts pertaining to gayness, lesbianism, and bisexuality already exist in the culture, and, in each case, they extend far beyond dictating feelings, attractions, and desires; in fact, these terms have helped to create entire cultural and social institutions that operate and function around a shared sexual identity (see, for example, Dyer's *Culture of Queers*, 1997).

Since gender identity and sexual identity are often conflated, it is pertinent to consider the ways in which culturally dominant sexual scripts pertaining to gender might affect participation in technosexual behaviors. Different sexual scripts for genders are the result of gender socialization (Gagnon & Simon, 1973; Shaughnessy, Byers, & Walsh, 2011; Wiederman, 2005). Citing Byers (1996), Shaughnessy, Byers, and Walsh (2011) observe that the traditional sexual script most prevalent in North America suggest that "men have stronger sexual needs and motivations that, when acted upon, enhance their social status. In contrast, women are expected to have fewer sexual needs, attach sexual activity to emotion and commitment, and experience status decreases with increasing sexual experience" (p. 420).

Furthermore, following a review of the literature, the researchers conclude that culturally available sexual scripts support a separation of sex and pleasure for men but not for women, who view sexual activity in the context of ongoing relationships (p. 420). This claim is supported by the fact that studies have repeatedly shown that men "engage in intercourse at a higher frequency and younger age, masturbate more frequently, watch

pornography more frequently, and have more casual sex partners" (Shaunessy et al., 2011, p, 420 citing Baumeister, Catanese, & Vols, 2001; and Petersen & Hyde, 2010). Thus, building from these findings, we can posit that participation in technosexuality will be motivated in part by gender.

Defining the Queer

Past research makes it clear that not all terms apply to every sexual minorities and that the triangulation of sexual identity across the dimensions of self-identification, behavior, and desire is paramount in any study about sexual identities. One term that encompasses this gray area is queer—a sort of catchall word for deviant (that is, non-normative) sexual desires, behaviors, appetites, and identities. Halperin (1997) writes that "queer is by definition whatever is at odds with the normal, the legitimate, [and] the dominant. *There is nothing particular to which it refers*." (p. 62, emphasis in the original). Similarly, Edwards (2010) posits that queer challenges "heteronormativity, binary structures of sex/gender/sexuality, universalizing explanations of sexuality, and/or discourses of essentialism" (p. 161).

Yet the extent to which the queer is empirical rather than just theoretical is unclear. Queer, and by extension the act of queering, are rooted in queer theory and are informed principally by the tenets of deconstructionism. As a critical theory, then, queer theory seeks to reveal and challenge normative biases and assumptions, specifically those related to sexuality and heteronormativity. To queer something, thus, is to challenge, subvert, and call into question those assumptions which deem the object under scrutiny natural, inherent, and factual. Specifically, queering involves rewriting, reshaping, and rethinking the stability of normative cultural practices by challenging cultural and sexual

identities (Hanmer, 2010, p. 150). Though the term first gained popularity in academic circles as a way of reading and interpreting texts, it has since been appropriated in various ways. Therefore, this study assumes that while queer is an identity label, it might also be used to describe behaviors and desires.

Queering Technology: Sexual Minorities and Technology Use

There is evidence to suggest that a unique relationship exists between sexual minorities and technology use. Notably, however, much of this evidence is anecdotal; little empirical research has been conducted to test—let alone substantiate— this claim. Much of the empirical research that has been conducted on this topic stems from the medical literature, leaving much to be desired in terms of sampling frames, social claims, and disciplinary techniques. This section is devoted to those social science studies that explicitly investigate the relationship between sexual minorities and technology use.

Stein (2003) suggests that the anonymity of cyberspace—that is, the space generated by an extensive networks of computers and computing devices, linked to one another primarily, though not extensively, through the internet—has been a particularly important piece in defining the relationship between sexual minorities and technology. Specifically, Stein argues that lesbian, gay, bisexual, and queer individuals are drawn to cyberspace as a place to explore and reify their same-gender feelings, potentially in the absence of social stigma facing sexual minorities in the real world. Similarly, Aka (2007) also argues that there exists an innate connection between sexual minorities and technology. Unlike Stein, though, Aka contends that the relationship between LGBT people and technology is rooted in the struggle for visibility and social gain, namely to disseminate information about and to show support for political causes.

Past empirical research examining the relationship between technology use and sexual identity is scant. Hillier, Joens, Monagle, Overton, Gahan, Blackamn, and Mitchell (2010) in a survey of same-gender attracted and gender questioning youth (ages 14 to 21) in Australia found that 97% of respondents (as opposed to 72% in the general Australian public) reported access to the internet at home. This finding is significant where sexual identity and internet use are concerned, as it reveals that nearly all same-gender attracted and gender questioning Australian youth have some access to the internet. The study also found that lesbian, gay, bisexual, and transgender youth use the internet to explore their sexual identities (76%), to find others with similar feelings, and to come out to people. The study concluded that young people who reported using the internet to explore issues related to their sexual identities were most likely to be male and attracted only to members of the same sex.

That the relationship between the internet and same-gender attracted and gender questioning youth is so strong is in many ways unsurprising. Past research has already put forward the finding that lesbian, gay, bisexual, and transgender youth commonly use the internet to explore and disclose their sexual minority status to others (Alexander & Losh, 2010). Furthermore, Drushel (2010) observes that out sexual minorities use social media sites like Facebook and MySpace to reify their sexual minority identities, whether through self-identification or through the maintenance of social capital. Cooper and Dzara (2010) note that the use of online tools and media are particularly important for sexual minorities, especially those who live in rural areas where they may not have opportunities to physically interact with similarly identified minority individuals. Thus,

the researchers stress the importance of online communities in helping to develop the connection between individual and collective identities.

Writing about the queer potential of the internet, Gregg (2010) discusses how gay fans construct virtual communities dedicated to alternate and oppositional readings of popular texts, claiming and queering (presumably heterosexual) bodies and representations. Similarly, Hanmer (2010) reinforces this notion by writing that queer readings and alternative uses of culturally available messages can be empowering for those who find themselves outside the dominant heterosexual culture. Likewise, Gross (2007) observes the potential of spaces like the internet to act as a communal gathering spot for sexual minorities, but also acknowledges that, as lines between cyberspace and reality become increasingly blurred, the virtual space afforded by the internet is in no way a digital utopia.

It is not only the creation of these virtual spaces that matter; the proliferation of information and communication technologies like the internet also have implications for sexual identities. Barber (2010) posits that the convergence of communications across broadband, entertainment, and mobile technologies will result in a "homemade" and "hobbyist" approach to sex and gender—one that encourages sexual identities that are "fluid, convergent, and interchangeable in time and space" (p. 255). This argument is particularly salient where the relationship between sexual identity and technology use is concerned. Namely, Barbar posits that as people have ongoing and continuous access to information and communication technologies, they will increasingly role play, perform, and participate in virtual communities. The repercussions of these "performances" will eventually effect some change in the physical world.

Studying MSM, Clift (2010) observes the link between technology use and sexually transmitted infections and diseases. The researcher points out that many MSM who use the internet to seek out sex partners do so on account of the anonymity afforded them by the technology. They consequently use the technology to anonymously and covertly meet sex partners with whom they engage in unprotected sex and other high-risk sex behaviors, which, in turn, puts them at risk for spreading and contracting sexually transmitted infections and diseases. This study highlights the fact that, as technology affords sexual minorities new means to explore issues related to their sexual identities—including sex—health-related matters continue to be a concern.

Sex, Technology, and Convergence

Information and communication technologies like the internet are at the center of much the extant literature on sexual identity and technology use. Relatively few studies, however, address the effect that convergence is having on how sexual minorities adopt and use these technologies. In this study, technological convergence refers to the integration of two or more digital technologies (e.g., a mobile phone, a digital camera, and the internet) into a single platform (Han, Chung, & Sohn, 2009). Convergence also refers to a process: an ongoing cultural collapse and exchange where infrastructures, modes of production, and patterns of consumption merge and interact in viscous networks of communication (Jenkins, 2006). This convergence of digital technologies, thus, creates new virtual spaces for sexual expression, exploration, and negotiation (e.g., Hardy, 2008).

As observed in Chapter 1, it's already well established that technosexual behaviors are increasingly routine, especially as convergent technologies are made

cheaper and, by extension, more available. Yet aside from these few descriptive statistics, there is virtually no empirical research on sexual behaviors and convergent technologies like mobile phones, smartphones, and tablet devices. There is some research to suggest that men and women use convergent technologies differently (e.g., Jin & Kim, 2005), but even this is scarce. The dearth of research on this topic has left a noticeable gap in the literature. Since such a shortage of information about convergent technologies and sexual behaviors exists, this literature review will turn briefly to research on internet-mediated sexual behaviors. On account of the fact that many convergent technologies are constructed on internet-based platforms, this overview will inform how researchers should to begin to think about sexuality and mobile convergent technologies.

In a meta-analysis of hundreds of scholarly articles on the internet's impact on sexuality, Döring (2009) observes that in the first decade of the twenty-first century, online sexual activity has become commonplace for large parts of Western world populations. Furthermore, the researcher comments that internet sexuality takes on different forms based on such social characteristics as gender, age, and (what she labels) sexual orientation. From her analysis, Döring proposes six dominant areas of online sexuality: pornography, including the production, use, and effects of this type of online media; sex shops, addressing the type of products for retail, who purchases them, and why; sex work, including the digital marketing of more traditional offline sex work and online sex works such as live sex shows broadcast via webcam; sex education, including the information that users both consume and disseminate; sex contacts, including both computer-mediated sexual exchanges as well as those contacts leading to real-world sexual encounters; and sexual subcultures, comprised mainly of sexual minorities, who

have their own resources for the five previously listed types of activities (pp. 1090-91). While this list is merely reflective of past research on internet sexuality, it is nonetheless a useful for thinking about the multiplicity of ways in which individuals use this technology for sexual purposes.

In concluding her article Döring lists a series of recommendations for future research on sexual behaviors and the internet. Among her list is the recommendation that future researchers consider the implications of interactive media on internet sexuality; that studies diversify their sample populations in terms of age, taking into account the behaviors and needs of older internet users; and that future research consider the potential benefits of sexual expression in web-mediated spaces rather than the possible negative effects (p. 1098). This list highlights the need for diversity in how researchers approach studying technosexual behaviors. And if Döring's claim that the majority of techno-sexual studies focus on the negative consequences of sexually engaging with technology is correct (and it appears to be), then future sex researchers should also be more mindful of the larger overriding cultural assumptions about sexuality. Historically, sexuality has been criminalized, pathologized, and demonized (Foucault, 1978). The empirical social sciences must be vigilant not to reproduce—unwittingly or not—these same cultural and historical messages about sex.

Several studies validate the claim that gender and sexual orientation are significant predictors of behavior when it comes to sexual behaviors and technology use. Regarding gender, Koch and Pratarelli (2004) found that males report participating in more sexually oriented activities using the internet than females. Similarly, Pritchard (2008), in an unpublished doctoral dissertation, found that men were more likely than

women to use the internet for sexual behaviors and that they were also more likely to search for sexual partners online.

It is at this point that it is useful to draw from some of the health literature on technology use and sexual behavior, as these studies can be useful in developing measurements. McFarlane, Bull, and Rietmeijer (2000) found that internet sex seekers were more likely to be men and gay. The researchers also found that people pursuing internet sex were more likely to report higher numbers of sexual partners and engage in higher-risk sexual behaviors such as anal sex. Two self-administered surveys conducted in British health clinics showed that gay men were significantly more likely to use the internet to search for sex partners than straight men or straight women (Bolding, Davis, Hart, Sherr, & Elford, 2006; Malu, Challenor, Theobald, & Barton, 2004), and a study of men who have sex with men revealed that between 1993 and 2002, there was approximately a 60% increase in the number of MSM who met their first sexual partner through the internet (Bolding, Davis, Hart, Sherr, & Elford, 2007).

Motivation

Citing Atkinson (1958) and Mook (1986), Markus and Kitayama (1991) observe, "The study of motivation centers on the question of why people initiate, terminate, and persist in specific actions in particular circumstances" (p. 239). Though past studies are useful for garnering predictors of participating in technosexual behaviors, almost none of these studies seem to take motivation into consideration. Put another why: Why do people engage in technosexual behaviors? Since so little is known about these kinds of behaviors, it is useful to take into account research that deals with sexual motivation and

need fulfillment. Research detailing these concepts might help to explain why people participate in technosexual behaviors.

Goodson, McCormick, and Evans (2001) identified curiosity as male college students' primary motivation for viewing sexually explicit materials on the internet. Relying on factor analysis, Boies (2002) identified three clusters of online sexual activity (OSA): seeking partners, entertainment, and sexual gratification. Defined by Cooper and Griffin-Shelley (2002), OSA "refers to the use of Internet (including text, audio, [and] graphic files) for any activity that involves sexuality for the purposes of recreation, entertainment, exploration, support, education, commerce, and/or seeking out sexual or romantic partners" (p. 77). Looking for partners involved such behaviors as using online dating services, participating in online chat rooms, and engaging online partners in cybersex. Entertainment involved the sending and receiving of sexually explicit materials online. Gratification involved the viewing of sexually explicit materials online while masturbating. Notably, the similarities between entertainment and gratification invites inquiry as to whether these behaviors are truly separate or highly correlated.

Broadly, then, we can conceive of motivations for OSA as falling into three categories: information seeking, relationship seeking and maintaining, and sexual gratification (Shaughnessy et al., 2011, p. 419). Shaughnessy, Byers, and Walsh (2011) offer an alternative conceptualization of these categories based on arousal: "non-arousal activities (e.g., seeking sexual information); solitary arousal activities (e.g., viewing sexually explicit videos); and, partnered-arousal activities (e.g., maintaining a sex partner online)" (p. 419). This is a more productive way for thinking about online sexual activity due to the discrete nature of the categories.

In their study of online sexual differences, the researchers focus primarily on gender differences, although they observe that regardless of gender, OSA was not as prevalent as might be expected, even among their "young, computer-literate sample," (p. 425). The study, which relied on traditional sexual scripts, found that similar percentages of men and women engaged in non-arousal online sexual activity and that nearly twice as many men than women reported solitary-arousal OSA experiences. Among individuals who had engaged in solitary-arousal OSA, men also reported doing so more frequently. The researchers offer two possible explanations for this observation: The first explanation relies on the theory of sexual scripts and posits that solitary-arousal sexual activities are a more acceptable part of sexual expression for men than for women. The second explanation suggests that women participate in solitary-arousal OSA less frequently because they find such activities "less subjectively and/or physiologically sexually arousing or pleasurable" (p. 425). There exists empirical research to support both the first explanation (e.g., Petersen & Hyde, 2010) as well as the second one (e.g., Allen, Emmers-Sommer, D'Alessio, Timmerman, Hanzal, & Korus, 2007), suggesting that the two exist in tandem rather than independent of one another.

As with solitary-arousal OSA, the researchers also further concluded that nearly twice as many men than women reported partnered-arousal OSA experiences. Thus, the researchers posit that partnered-arousal OSA experiences for straight men are limited by the comparatively low number of women who participate in these kinds of behaviors. Consequently, this invites the logical conclusion that the frequency of partnered-arousal OSA should be highest for men who have sex with men (MS). Indeed, in a study of internet sexuality in Norway, Træen, Nilsen, and Stigum (2006) found that MSM

reported more erotic chatting than straight men. However, the degree to which MSM engaged in other kinds of partnered-arousal OSA is unclear. Træen, Nilsen, and Stigum (2006) also found that MSM were more likely than straight men to rely on the internet for solitary-arousal OSA.

In a study of the variables that affect the online viewing of sexually explicit material, Byers, Menzies, and O'Grady (2004) test Cooper and colleague's "Triple-A Engine," which posits that access, affordability, and anonymity are the forces driving and accelerating OSA. Overall, the researchers found that only one technological factor in their study affected online exposure to sexually explicit material: the amount of time per week spent online. Gender and the amount of time respondents spent looking at non-internet pornography also proved to be significant predictors of online exposure. Internet skill, access, and privacy did not affect respondents' online exposure to sexually explicit materials.

Attitudes. Individual attitudes and perceptions of sexual behaviors are likely to affect motivation where technosexual behaviors are concerned. An attitude is an evaluation of some aspect of an individual's world that is typically measured by an index constructed of bipolor evaluative or affective scales (Ajzen & Fishbein, 1977, p. 889). An opinion is similar to an attitude except for the fact that the measurement of an opinion "leans heavily on a single question for a given issue" (McNemar, 1946, p. 290). Measurements about attitudes pertaining to sexual behaviors are numerous (e.g., Fisher & Hall, 1988; Fisher, White, Byrne, & Kelley, 1988; Yost, 2009). In spite of this, attitudinal scales measuring openness to sexual expression seem to be especially relevant

for the study of technosexual behaviors. Sociosexuality (Simpson & Gangestad, 1991) is a good illustration of such a scale.

Sociosexuality "refers to a person's willingness to engage in sexual activity with a variety of partners outside of a romantic relationship" (Yost & Zurbriggen, 2006, p. 163). In other words, sociosexuality is an indication of a person's comfort with casual sex. It is measured using the Sociosexual Orientation Inventory (Simpson & Gangestad, 1991). Individuals who score high on the inventory are said to possess an unrestricted sexuality, while individuals with lower scores are said to have a restricted sexuality. Restricted sexuality is generally correlated with a preference for an emotional bond with a partner before having sex; unrestricted sexuality is generally used to describe persons for whom sex can occur outside the context of a romantic relationship (Yost & Zurbriggen, 2006, p. 163). Simpson and Gangestad (1992) found that individuals with an unrestricted sexuality tend to value social visibility and physical attractiveness in romantic partners. A review of the extant literature shows that men are typically more unrestricted than women (Simpson & Gangestad, 1991; Wright & Reise, 1997; Yost & Zurbriggen, 2006). In addition to gender, age and religiosity have also been shown to have an effect on sexual permissiveness, with older individuals and believers generally indicating less permissive attitudes about sex (Le Gall, Mullet, & Shafighi, 2002)

Studies that measure attitudes about different sexual behaviors are scarce. Wilson and Medora (1990) found gender differences for attitudes about the acceptability of extramarital sex, oral sex, and anal sex, with male respondents indicating more permissive attitudes than female respondents about all three behaviors (it is important to note, however, that neither men nor women found the behaviors acceptable; instead

attitudes oscillated between neutral and findings the behaviors unacceptable). Similarly, Laumann et al. (1994) found that men were more likely than women to indicate finding any number of sexual behaviors very appealing, including giving and receiving oral sex, group sex, anal sex, and anonymous sex. In a meta-analysis of gender difference in sexual attitudes, Petersen and Hyde (2011) found that generally men were more sexually permissive, more accepting of premarital sex, extramarital sex, and masturbation, and less likely to report feelings of anxiety or guilt as the result of a sexual encounter than women. However, the researchers also observe that many of the effects are small and have decreased over time, particularly as women's sexuality becomes less taboo and shameful (p. 157).

Need fulfillment. Building on Bakan's (1966) theory of the duality of human existence, Prager and Buhrmester (1998) identify three primary dimensions of human needs: agentic, communal, and survival (p. 440). Agentic refers those needs characterized by a sense of agency, which "manifests itself in self-protection, self-assertion and self-expression" (Prager & Buhrmester, 1998, p. 439, citing Bakan, 1966, p. 114). Communal refers to those needs characterized by communion, or "the sense of being at one … in contact, openness, and union (Prager & Buhrmester, 1998, p. 439, citing Bakan, 1966, p. 114). Finally, survival is characterized by those needs related to physical safety, health, food, and shelter (Prager & Buhrmester, 1998, p. 440). These dimensions were generated in part as the result of a meta-analysis of theorists such as Fromm (1956), Horney (1950), Maslow (1968), and Murray (1938). Broadly, need fulfillment can be thought of as a type of motivation in which a behavior is enacted in order to satisfy a need or needs from one or more or more of three human need dimensions.

Prager and Buhrmester (1998) characterize communal needs as those relating to sexual fulfillment, affection, love, intimacy, support, nurturance, companionship, fun, and enjoyment (p. 442). These needs seem especially relevant for thinking about motivations for participating in technosexual behaviors. It is important to note, however, that it is reasonable that other dimensions of human needs might also be relevant for the study of this kind of behavior (e.g., if money is being exchanged for sex that is mediated by technology, needs related to survival instead of communal fulfillment may be the focus). However, since technosexual behaviors are those behaviors involving the use of convergent technology for sexual gratification, we will focus primarily on the communal dimension of need fulfillment.

Prager and Buhrmester (1998) found that both verbal and non-verbal intimate communication in couple relationships contributes to individual communal need fulfillment for both men and women. Thus, for individuals in couple relationships, communication of intimacy is often seen as having an effect on need fulfillment. Nurturance, or filling the needs of one's partner, is also a motivating factor when it comes to intimacy. In a study of consenting to unwanted sexual activity, O'Sullivan and Allgeier (1998) found that 38% of college students surveyed reported nonconsensual sexual activity with desire to satisfy a partner's needs as the most common motive for this behavior. Investigating why people turn to the internet for sexual satisfaction, McKenna, Green, and Smith (2001) found that individuals who are barred from expressing important sexual needs in offline relationships are more likely to turn to the internet to do so and, consequently, are more likely to convey a desire to express the mediated sexual self in real world relationships. Thus, exploration of the sexual self

through technologies may depend upon individual levels of comfort with the sexual self and the willingness to share desires and attractions with others in real world (i.e., non-virtual) settings.

Research Questions and Hypotheses

Given the empirical and anecdotal research on sexuality and convergent technologies, this study seeks to investigate the relationship between sexual identity and technosexual behaviors. Based on the extant literature, I propose the following overarching research question:

RQ1: What is the relationship between sexual identity and technosexuality?

This research question is composed of two distinct constructs: sexual identity and technosexuality. Each of these concepts is observed relying on a variety of measurements and operationalizations. Given the exploratory nature of this work, and given that both technosexuality and sexual identity are latent constructs, each is investigated separately before they are explored jointly. Thus, the following hypotheses and subsequent research questions are proposed.

Sexual Identity

Sexual identity, broadly, refers to a conceptualization of the sexual self. Since sexual identity and gender identity are so closely linked, it is first pertinent to explore gender identity in the sample population, particularly as it relates to prescribed sex at birth.

RQ2: What is the empirical relationship between gender identity and sex at birth?

If there is discord between gender identity and sex at birth in the sample population, it will also be necessary to make adjustments to preserve this transgender component of the sample.

The next research questions and hypotheses deal primarily with explorations and validations relating to the empirical study of sexual identity.

> H1: Controlling for gender identity, gay respondents report first same-gender attractions at an earlier age than lesbians, bisexuals, or queer-identified respondents.
>
> H2: Controlling for gender identity, gay respondents report disclosure of same-gender sexuality at an earlier age than lesbians, bisexuals, or queer-identified respondents.
>
> RQ3: What role, if any, does technology play in disclosure of minority sexual identities?
>
> RQ4: What is the relationship between sexual desire and sexual identification?
>
> RQ5: What is the relationship between sexual behavior and sexual identification?
>
> H3: Controlling for gender identity, gay respondents will report more lifetime sexual partners than lesbians, bisexuals, or queer-identified respondents.
>
> RQ6: What is the relationship between sexual self-identification, desire, and behavior?

Though many of these measures have nothing directly to do with the study of technosexual behaviors, they serve as validity checks for the empirical analysis of sexual identity.

Since previous research indicates that sexual self-identification, behavior, and desire are not always concordant phenomena, this study also seeks to generate a measure that takes the incongruity between these dimensions into consideration.

> RQ6: How can the incongruity between sexual self-identification, behavior, and desire be taken into account in a single empirical measure?

This research question, of course, operates under the assumption that such a measure is capable of being produced. Given the extensive review of queerness so far in this study, another way to think about this research question is that it considers the possibility for an empirical measure of queerness. In the context of sexual identity, queerness may be understood as any incidence of incongruity between its three dimensions. This study, then, also presumes that sexual identity is fluid identity category rather than a fixed or stable one.

Technosexuality

Technosexuality refers to the convergence of sexuality and technology across digital media platforms. Previous studies of technically mediated expressions of sexuality have been contained to single media platform (e.g., Shaughnessy et al., 2011), usually a computer mediated one. This study seeks to study incarnations of technosexual behaviors across an array of technological platforms, including desktop and laptop computers, mobile phones, smarthphones, and tablet devices. Since very little is known about technosexual behaviors, it is first pertinent to explore the types and frequencies of these kinds of behaviors.

> RQ6: What are the different categories of technosexual behaviors, and how frequently do respondents participate in them?
>
> RQ7: What is the relationship between technosexual behaviors across different technological platforms?

These research questions will begin to establish a working paradigm for what constitutes technosexual behaviors and how different kinds (i.e., clusters) of technosexual behaviors are related.

Motivation for participating in technosexual behaviors must also be taken into consideration. Thus, the following hypotheses and research questions are proposed:

> H4: As respondents' sexuality becomes more unrestricted, the more they will participate in technosexual behaviors.

In other words, more unrestricted sociosexual orientations will predict higher participation in technosexual behaviors. Furthermore, as technosexual behaviors are culturally constructed as deviant (e.g., Shaughnessy et al., 2011), respondents' attitudes about other taboo sex acts may also be an indicator of their likelihood to participate in these kinds of behaviors.

> H5: The more appealing respondents find deviant sexual behaviors and scenarios, the more likely they will be to participate in technosexual behaviors.

> RQ8: How do opinions about monogamy affect participation in technosexual behaviors?

The next set of hypotheses explores how need fulfillment, specifically related to communal needs, affects technosexual participation. As previously stated, communal needs assume that the fulfillment of such needs related to sex, affection, love, intimacy, support, nurturance, companionship, fun, and enjoyment (Prager & Buhrmester, 1998) are inherent to human existence. Those needs pertaining to sex and desire are likely to be particularly influential for participation in technosexual behaviors, thus leading to the following hypotheses:

> H6: As the need for sexual satisfaction becomes more important, respondents are more likely to participate in technosexual behaviors.

> H7: As the need for nurturance becomes more important, respondents are more likely to participate in technosexual behaviors, controlling for relationship status.

H8: As the need to discuss sexual experiences with friends becomes more important, respondents are more likely to participate in technosexual behaviors, controlling for the need for collective self-esteem.

H9: As respondents' sexual self-conceptualizations increases, the more likely they are to participate in technosexual behaviors.

H10: As the need to feel sexually desired becomes more important, respondents are more likely to participate in technosexual behaviors.

Sexuality Identity and Technosexuality

Applying the theory of sexual scripts to technosexual behaviors leads to the proposal of the following hypotheses:

H11: Male respondents will report a higher frequency of participation in technosexual behaviors than female or transgender respondents.

H12: Controlling for gender identity, gay respondents will report a higher frequency of participation in technosexual behaviors than lesbian, bisexual, straight, or queer respondents.

As previously stated, anecdotal relationships between sexual minorities and technology use have been previously grounded in the struggle for equality and civil rights. Literature in this area is the basis for the following research question:

RQ9: What is the relationship between virtual queer participation in non-sexual behaviors and participation in technosexual behaviors?

Theoretical Model

Figure 1 displays the proposed theoretical model predicting technosexuality. The model consists of three exogenous variables (sexual identity, gender, and technology use) as well as five endogenous variables (attitudes about sex, need fulfillment, sexual history, frequency of sexual behaviors, and technosexuality). In this model, all the constructs are configured as having a direct effect on technosexuality. Furthermore, attitudes, sexual history, frequency of sexual behaviors, and communal need fulfillment act as mediating

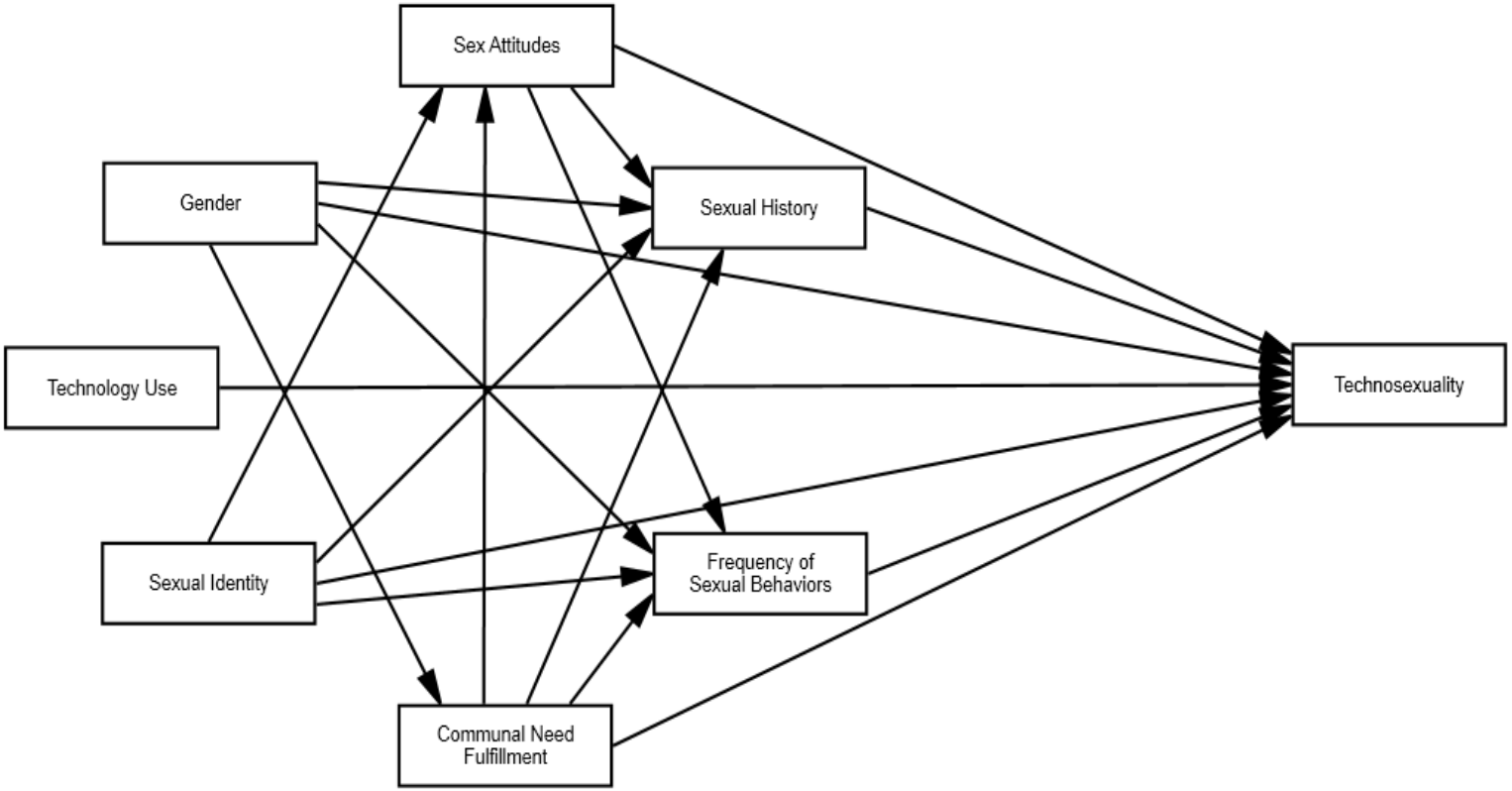


Figure 1. Theoretical model predicting technosexuality.

Constructs for gender and sexual identity. Thus, male respondents as well as lesbian, gay, bisexual, and queer respondents are more likely to report higher sex needs, more liberal sexual attitudes, more sexual partners, and engage more frequently in sexual behaviors, which, in turn, will further increase technosexual participation.

Chapter 3: Methodology

This chapter consists of two parts: (1) study design and (2) operational definitions. Method, sampling frame, and data collection technique are discussed in detail in the first section. In the second section, descriptions of how variables are operationalized and at which levels of measurement are explained.

Study Design

This study employed survey research as its primary data collection tool. Survey research is useful for describing the characteristics of a given population (Babbie, 2010). This study is primarily concerned with sexual behaviors, attitudes, and technology use among lesbian, gay, bisexual, and queer identified individuals. However, since this study expands measurements of sexual identity to include behaviors, desires, and attractions, it also calls for a sample from the general population. Respondents participated in a web-based questionnaire administered by Survey Gizmo, an online survey software tool that allows researchers to build instruments and to collect data. Once questionnaires were completed, they were stored in a password-protected online database for download into a data analysis program such as the Social Package for Social Sciences (SPSS). The unit of analysis in this study is the individual respondent; thus, this research focuses primarily on measuring individual's behaviors, desires, attractions, and sex histories.

Sample and Data Collection

Since the questionnaire poses questions about sensitive topics (namely, current and past sexual behaviors, attractions, and desires), procedures from past studies were adopted in order to assure anonymity and confidentiality (e.g., Binik, Mah, & Kiesler, 1999; Peter & Valkenburg, 2006). Respondents were first made aware of the topic of the

survey in the mass email that solicited participation. In the body of the email, respondents were provided with my email address and were informed that they could contact me if they had questions or concerns about the nature of the study. Respondents were again made aware of the topic on the informed consent page, which they were instructed to read in full before beginning the questionnaire. In the informed consent, respondents were assured that all responses are anonymous and confidential and that their responses would only be analyzed in aggregate. Respondents were informed that they had the option to quit the survey at any time and that they could opt out of responding to any measure by checking the "prefer not to answer" option in the answer choices.

The questionnaire took roughly 15 minutes to complete. Respondents were also invited to enter a drawing for a $50.00 Amazon.com gift card by entering their email into an online drawing. If respondents chose to enter the drawing, they clicked on a link that took them away from the Survey Gizmo website so that their email addresses could not be linked with their responses.

Pretests. Two pretests were conducted during this study. In April 2011 the survey was pretested using a convenience sample of 63 respondents from at a private, mid-sized Northeastern university. The goal of the pretests was to monitor the completion rate of questions, to time how long it takes respondents to complete the questionnaire, and to test the validity of the measurements. In this version of the survey, respondents were also provided space for offering additional feedback on measures or items they found particularly confusing or problematic. This feedback, then, was taken into account before disturbing the survey to the primary sampling frames.

Following data collection, a second pretest was administered in January 2012 to estimate respondents' opinion about the expectedness of different sexual behaviors and sexual desires when they were paired with different sexual identities ($N = 61$). The goal of this pretest was to gauge the extent to which observed relationships between sexual identification, desire, and behavior were perceived as incongruous. The perceived expectancy data were then used in the construction of another variable (discussed in detail in Chapter 4).

Primary sample and data collection. The general sample was collected by sampling email addresses from an email address database at a private, mid-sized Northeastern university from May through September 2011. From this database 25,000 email addresses were randomly sampled and invited to participate in the survey. Since the database contains email addresses of alumni as well as current undergraduate and graduate students, it is difficult to know roughly how many email addresses were active at the time the invitations were distributed. Furthermore, since the bulk of data collection occurred during the summer months, it is difficult to assess the percentage of students that were regularly checking their university-based email addresses. Thus, a response rate is difficult to estimate in this instance. Of the 25,000 emails sent, 1,594 respondents submitted completed questionnaires.

Given this study's focus on sexual identity, a purposive sample of LGBTQ respondents was also collected. Emails were sent to 207 LGBT resource centers and groups on college campuses as well as approximately 120 LGBT community centers and organizations throughout the United States. If organizations agreed to participate, they were provided with a web link for distribution.

Finally, responses were collected by distributing a web link to the survey via my own personal social networks and social media sites like Facebook and Twitter. Users linked with me on these sites (and other graduate students, in particular) would then frequently re-distribute the link with their own social networks, thus adding a snowball sample of respondents to the study.

Though the majority of respondents in the study were collected using random sampling methods, the purposive sampling of LGBTQ respondents as well as the reliance on snowball sampling via social networking sites render the overall sample non-probabilistic. Since the LGBTQ community lacks an exhaustive list or directory, identifying the population is impossible, and, therefore, probability sampling is problematic (e.g., Chen, 2011). As previous research has pointed out (e.g. Meyer & Wilson, 2009), relying on methods such as random digital dialing is no longer a cost effective way to conduct survey research when dealing with a select population; furthermore, in 2009 researchers found that one out of every four homes in America had only wireless telephones, and trend data suggests that this number has only grown since (Blumberg & Luke, 2009). Thus, relying on the networks of community groups and university organizations is one way to access this decentralized population. While the sample may not be perfectly representative, it offers diversity for sexual identification.

Operational Definitions

The questionnaire is divided into eight sections. The following sections detail at which level and how each of the variables is measured. All answer choices appear in the form of a drop-down menu from which respondents choose their answers. Also, per institutional review board specification, "prefer not to answer" appears in the possible

answers for all questions, thus offering respondents the chance to not answer questions. The row order of items that appeared in tables (e.g., scales and indices) was randomized to control for any order effect.

Demographic Measures

Demographic measures included such variables as age, sex at birth, gender identity, race, religiosity, political views, education, income, relationship status, and primary residence type.

Age. Age was measured as an interval variable. The minimum age choice offered is 18; the maximum was 100.

Sex at birth. Sex at birth was measured as a nominal variable. Possible answer choices included female (1), intersex (2), and male (3).

Gender identity. Gender identity was as a nominal variable. Possible answers included female (1), transgender (2), male (3), and genderqueer (4).

Education. Education was measured as an ordinal variable. Answers ranged from "8th grade or below" through "graduate school (J.D./M.D./Ph.D.)."

Race. Race was measured as a nominal variable. Possible answer choices included "African-American or Black," "Asian," "Caucasian or White," "Latino or Hispanic," "Native American," "Pacific Islander," "mixed" and "other." Respondents were instructed to check all terms that apply.

Religiosity. Religiosity was measured by asking respondents how often they attend religious services. Possible answers included "multiple times per week" (7), "once per week" (6), "2-3 times per month" (5), "once per month" (4), "5-11 times per year" (3), "less than 5 times per year" (2), and "never" (1).

Income. Income was measured as an ordinal variable using two questions. The first question asks respondents to choose the category that best described their annual income. Answers ranged from "less than $10,000" to "more than $150,000." Answer choices between this minimum and maximum vary by a range of 10,000, such that possible answers include "$10,000-$19,999," "$20,000-$29,999," etc. The second question asked respondents to select the category that best described their household income. Answer choices were the same as those for the first income measure.

Political affiliation. Political affiliation was measured using a 7-point Likert scale. The question asked respondents to describe their political views. Reponses range from "very liberal" (1) to "very conservative" (7).

Relationship status. Relationship status was measured as a nominal level variable. Possible answer choices included "single," "in a relationship," "married," "partnered," "divorced," "separated," "widowed," or "other."

Residence type. Residence type was measured as a nominal variable. Respondents were asked to choose the term that best described their primary residence during the past 12 months. Possible answer choices included "urban," "suburban," "small town," and "rural."

Technology Use Measures

Technology use was measured by assessing the frequency with which respondents used difference technological devices as well their technology readiness.

Technology use. Technology use was measured by asking respondents to estimate the frequency with which they used a desktop computer, a laptop computer, a cellular phone (non-smartphone), a smartphone, and a tablet device during a typical

week. Responses included “never” (1), “rarely” (2), “sometimes” (3), “frequently” (4), and “very frequently” (5).

Technology readiness. Technology readiness was measured using the optimism index from the Technology Readiness Index (Parasuraman, 2000). The Technology Readiness Index gauges opinions about technology as routines and everyday activities become increasingly computer-mediated. The optimism index was composed of # items that measured opinions on the following: ... Answers included... Items were then indexed to construct the optimism index (Cronbach’s $\alpha = .81$).

Internet use. Internet use was measured by asking respondents to estimate how many hours they spend using the internet for personal (i.e., non-work related activities) on an average day.

Text messages. The number of text messages sent and received on an average day was measured as two, separate ratio variables. The items were then indexed to form the text message variable (Cronbach’s $\alpha = .96$).

Motivation Measures

Motivation was measured by assessing the importance of respondents’ communal need fulfillment. Need fulfillment was measured by asking respondents to estimate the importance of a series of needs hypothesized to influence technosexual participation. Need measures were adapted, in part, from the Need Fulfillment Index (Prager & Buhrmester, 1998), which was itself adapted from a variety of sources, including the Personality Record Form (Jackson, 1974).

Sexual satisfaction. Sexual satisfaction was measured by asking respondents to provide their opinions about the following items: the need for sexual satisfaction when

you desire it; the need for sexual fulfillment; and the need to kiss or touch someone you find physically attractive. Responses included “not at all important” (1), “unimportant” (2), “neither important nor unimportant” (3), “important” (4), and “very important” (5). Items were then indexed (Cronbach’s α = .74).

Sexual experiences as social currency. Sexual experiences as social currency or the need to discuss sexual experiences with friends was measured by asking respondents to give their opinions on the following items: it's important that I can share my sexual desires and thoughts with others; it's important that my friends are able to relate to my sexual experiences; and I feel the need to discuss my sexual experiences with friends. Responses included “not at all important” (1), “unimportant” (2), “neither important nor unimportant” (3), “important” (4), and “very important” (5). Items were then indexed (Cronbach’s α = .79).

Nurturance. Nurturance was measured by adapting items from the Rewards/Costs Checklist from the Interpersonal Exchange Model of Sexual Satisfaction (Lawrence & Byers, 1995). Respondents were asked to give their opinions on the following items: the need to engage with your romantic and/or sexual partner; the need to satisfy the desires of your romantic and/or sexual partners; and the need to feel a connection with your romantic and/or sexual partner. Responses included “not at all important” (1), “unimportant” (2), “neither important nor unimportant” (3), “important” (4), and “very important” (5). Items were then indexed (Cronbach’s α = .79).

Sexual desire. The need to feel desired sexually was measured by asking respondents to provide their opinions on the following items: the need for others to find you physically attractive; the need to feel desired sexually, even by people you don't

know; and the need to feel desired by the people you have sex with. Responses included "not at all important" (1), "unimportant" (2), "neither important nor unimportant" (3), "important" (4), and "very important" (5). Items were then indexed (Cronbach's α = .65). This index was adapted, in part, from the Sexual Desire Inventory (Spector, Carey, & Steinberg, 1995)

Sexual self-conceptualization. The degree to which respondents conceived of themselves as inherently sexual was adapted from the sexual preoccupation index from the Sexuality Scale (Snell & Papini, 1989). Respondents were asked to respond to the following items: the need to satisfy my sexual urges is more important than most of my other needs; I am more sexual than other people; having sex makes me feel desired; and I become irritable or bad-tempered if I don't have sex regularly. Responses included "strongly disagree" (1), "disagree" (2), "neither agree nor disagree" (3), "agree" (4), and "strongly agree" (5). Items were then indexed (Cronbach's α = .74).

Collective self-esteem. Collective self-esteem was measured using items from the Collective Self-Esteem Scale (Luhtanen & Crocker, 1992). Items included: overall, my group memberships have very little to do with how I feel about myself; the social groups I belong to are unimportant to my sense of what kind of person I am; the social groups I belong to are an important reflection of who I am; and in general, belonging to social groups is an important part of my self-image. Responses included "strongly disagree" (1), "disagree" (2), "neither agree nor disagree" (3), "agree" (4), and "strongly agree" (5). The first two items were then reverse coded before all four items were indexed to construct the collective self-esteem index (Cronbach's α = .80).

Sexual Attitudes Measures

Attitudes about sex were measured by assessing respondents' sociosexual orientations, appeal of deviant sexual behaviors, and opinions about different types of romantic relationships.

Sociosexual orientation. Sociosexual orientation was measured using the revised Sociosexual Orientation Inventory (Penke, 2011). Respondents were asked to provide answers to the following measures: sex without love is OK; I can imagine myself being comfortable and enjoying casual sex with different partners; I would feel comfortable if I learned that my closest non-sexual friend was in a consensual, non-monogamous relationship; I believe that monogamy is more likely than other romantic arrangements to result in a successful long-term relationship; I would be willing to explore a non-monogamous relationship arrangement if it was important to my significant other; and I do not want to have sex with a person until I am sure that we will have a long-term, serious relationship. Answers were coded along a 9-point Likert scale from "strongly disagree" (1) to "strongly agree" (9). Items four and six were then reverse coded.

Respondents were also asked to reply to the following questions: How often do you have fantasies about having sex with someone with whom you do not have a committed romantic relationship? How often do you experience sexual arousal when you are in contact with someone with whom you do not have a committed romantic relationship? In everyday life how often do you have spontaneous fantasies about having sex with someone you have just met? Possible answers included "never" (1), "very seldom" (2), "about once every two or three months" (3), "about once a month" (4), "about once every two weeks" (5), "about once a week" (6), "several times per week"

(7), “nearly every day” (8), and “at least once a day” (9). Items were then indexed to construct sociosexual orientation (Cronbach’s α = .94).

Deviant behaviors appeal. Appeal of deviant sexual behaviors was measured by asking respondents to gauge how appealing they found the following items: having sex with more than one person at the same time; having sex with someone you don’t personally know; a partner stimulating your anus with his/her fingers; stimulating a partner's anus with your fingers; a partner performing anal oral sex (rimming) on you; performing anal oral sex (rimming) on a partner; receiving anal intercourse; and giving anal intercourse (Laumann et al., 1994). Possible answers included “not at all appealing” (1), “not appealing” (2), “somewhat appealing” (3), and “very appealing” (4). The six anal sex items were then indexed (Cronbach’s α = .91).

Relationship type appeal. The appeal of different types of romantic relationships was measured by asking respondents to rate how appealing they found each of the following relationship scenarios: monogamy (where you and your partner only have sex with one another); consensual non-monogamy (where you and your partner agree to have sex with one another as well as other people); and non-consensual non-monogamy (where you and/or your partner engage in sex outside the relationship without receiving permission or informing one another of the event). Responses included “not at all appealing” (1), “not appealing” (2), “somewhat appealing” (3), and “very appealing” (4).

Sexual Identification and Desire Measures

The next section measured respondents’ self-reported sexual identity as well as their sexual desires, attractions, and behaviors. If respondents identified as bisexual, gay, homosexual, lesbian, or queer they are directed to a section that posed further questions

about issues related to their sexual minority identity (e.g., self-disclosure). All respondents were then asked about their gendered sexual attraction and the appeal of having a same-gender sexual encounter.

Self-identification. Self-identification was measured as a nominal variable. Respondents were instructed to select the term they would use to describe their own sexual identity. Answer choices included "bisexual," "gay," "heterosexual," "homosexual," "lesbian," "queer," "straight," and "other." Duplicate terms (e.g., "straight" and "heterosexual") were used in an attempt to be exhaustive and to provide respondents with an array of terms. Respondents were clearly instructed to choose the term that they would use to describe themselves.

Age of first same-gender desire. For those respondents who identified as bisexual, gay, homosexual, lesbian, or queer, the age at which they first remember feeling same-gender desires was measured as a ratio variable.

Age of first disclosure of same-gender desire to another person. For those respondents who identified as bisexual, gay, homosexual, lesbian, or queer, the age at which they first disclosed having same-gender desires to another person was measured as a ratio variable.

Method of first disclosure. For those respondents who identified as bisexual, gay, homosexual, lesbian, or queer, the method through which they first disclosed having same-gender desires to another person was measured as a nominal variable. Answer choices included "email," "face to face conversation," "instant message or online chat," telephone/mobile phone," "text message," "Skype/other video interface," "I have not shared this info with anyone else," and "other."

Desire. Desire was measured using a series of questions. The first question measured desire on a 5-point Likert scale and asked respondents to which gender they are sexually attracted. Answers included "only men" (1), "mostly men" (2), "both men and women" (3), "mostly women" (4), and "only women" (5). Desire was then measured using a 4-point (forced-choice) Likert scale item where respondents were asked to rate the appeal of having a same-gender sexual encounter. Answers included "not at all appealing" (1), "not appealing" (2), "somewhat appealing" (3), and "very appealing" (4).

Sexual Behavior Measures

The instrument defined sex for respondents as "any mutually voluntary activity with another person that involved genital contact and sexual excitement or arousal (even if intercourse or an orgasm did not occur)" (Laumann et al., 1994, p. 67). All measures asking about respondents' number of sex partners were measured at the ratio level.

Number of lifetime sex partners. Respondents were asked to identify the number of sex partners they have had since puberty.

Number of one-time sex partners. Respondents were asked to identify the number of sex partners they have had sex with on one—and only one—occasion since puberty.

Number of sex partners in the last year. Respondents were asked to identify the number of sex partners they have had in the last 12 months.

Number of sex partners by gender. The gender of partners is measured using a series of questions that asked respondents if they've had sexual experiences with males, females, both, or neither. Respondents were then asked to identify how many sex partners of each gender they've had since puberty.

Frequency of masturbation. Frequency of masturbation was measured by asking respondents how frequently they engaged in masturbation during the past 12 months. Answers included “not at all” (1), “once or twice” (2), “3-11 times” (3), “once a month” (4), “2-3 times a month” (5), “weekly” (6), “2-3 times a week” (7), and“4 times or more a week” (8).

Frequency of pornography exposure. Frequency of pornography exposure was measured by asking respondent how frequently they looked at pornographic materials during the past 12 months. Answers included “not at all” (1), “once or twice” (2), “3-11 times” (3), “once a month” (4), “2-3 times a month” (5), “weekly” (6), “2-3 times a week” (7), and“4 times or more a week” (8).

Infidelity. Infidelity was measured by asking respondents if they had ever been involved in a romantic and/or sexual relationship where they made an agreement not to get involved with anyone else, but did so (either sexually or emotionally) anyway. Responses included “no” (1) and “yes” (2).

Technosexual Measures

The next section posed questions about sexual behavior and technology use.

Computer usage and sexual behavior. Computer usage and sexual behavior was measured using eight, 5-point Likert scale items gauging the frequency with which respondents engaged in certain behaviors. Variables included the use of a computer to perform the following behaviors: to seek out potential sex partners (via websites explicitly intended for this purpose); to seek out potential dates (for example, via dating websites); to chat or instant message with potential sex partners; to e-mail or send nude or sexually explicit photographs or videos of oneself; to post to the web a nude or

sexually explicit video oneself; to meet someone with whom the respondent then had sex; to view pornographic materials; and to engage in web-based video sex (for example, performing sexual behaviors while using Skype). Answers included "never" (1), "rarely" (2), "sometimes" (3), "frequently" (4), and "very frequently" (5).

Mobile phone usage and sexual behavior. Mobile phone usage and sexual behavior was measured using six, 5-point Likert scale items gauging the frequency with which respondents used a mobile phone to perform the following behaviors: to send sexually explicit text messages; to receive sexually explicit text messages; to send nude or sexually explicit photos of oneself; to receive nude or sexually explicit photos; to send nude or sexually explicit videos of oneself; and to receive nude or sexually explicit videos. Answers included "never" (1), "rarely" (2), "sometimes" (3), "frequently" (4), and "very frequently" (5).

Smartphone/tablet usage and sexual behavior. Smartphone usage and sexual behavior was measured using five, 5-point Likert scale items gauging the frequency with which respondents used a smartphone or tablet device to engage in the following behaviors: to search for sexual partners using a geosocial networking application; to view pornographic images, videos, or content; to search for information on sex, including condom use, birth control, sexual positions, etc; to meet sex partners in real life; and to engage in web-based video sex (for example, performing sexual behaviors while sing Skype). In the event that a respondent did not own a smartphone or tablet, frequency of behaviors was measured the hypothetical. Answers included "never" (1), "rarely" (2), "sometimes" (3), "frequently" (4), and "very frequently" (5).

Social Media Usage and Sexual Identity

Variables pertaining to social media usage and sexual identity measured whether respondents disclosed a sexual identity in social networking profiles and whether they relied on profiles to post about topics related to their sexual identity.

Facebook sexual identity disclosure. In order to measure Facebook sexual identity disclosure, respondents were asked to answer the following question: Do you disclose your sexual identity in your Facebook profile? Answers included "no" (1), "yes" (2), and "I do not have a Facebook profile" (3).

Twitter sexual identity disclosure. In order to measure Twitter sexual identity disclosure, respondents were asked to answer the following question: Do you disclose your sexual identity in your Twitter bio? Answers included "no" (1), "yes" (2), and "I do not have a Twitter account" (3).

Post about sexual identity-related topics on Facebook. In order to measure whether respondents post about topics on Facebook related to their sexual identity, they were asked to respond to the following question: Do you post about topics—whether personal or news stories—related to your sexual identity on Facebook? Answers included "no" (1), "yes" (2), and "I do not have a Facebook profile" (3).

Post about sexual identity-related topics on Twitter. In order to measure whether respondents post about topics on Twitter related to their sexual identity, they were asked to respond to the following question: Do you post about topics—whether personal or news stories—related to your sexual identity on Twitter? Answers included "no" (1), "yes" (2), and "I do not have a Twitter account" (3).

CHAPTER 4: SAME-GENDER SEXUALITY

This chapter showcases findings related to same-gender sexuality as defined by the following dimensions: self-identification, behavior, and desire. Since popular conceptualizations of sexual identity are rooted primarily in gender constructs, data related to gender and the construction of a gender variable as a unit of measurement are considered first. Following the results on gender, findings on same-gender desire, behavior, and self-identification are presented. The possibility and investigation of queer empiricism are then explored in an attempt to devise a measure that encompasses all three of these dimensions.

Sex and Gender

RQ2: What is the empirical relationship between gender identity and sex at birth?

In survey research sex is traditionally measured dichotomously, with response options consisting of male and female (e.g., the General Social Survey). Sex, which is usually decided at birth, differs from gender, though empirical research typically neglects to make this distinction. Gender, the cultural and social appropriation and performance of sex, is seldom measured unless it is the specific focus of the research (e.g., gender identity might be an important factor in research examining bullying in elementary schools). This project measures sex and gender are measured by asking respondents to identify both their assigned sex at birth (also commonly referred to as *biological sex*) as well as their current gender identity. Furthermore, this research allowed respondents to use terms aside from those ones that are typically associated with the sex and gender binaries (i.e., *male* and *female*).

In total, 2,059 respondents submitted completed questionnaires. Of these respondents, 65.2% identified female as their sex at birth and 34.8% identified male as their sex at birth. Regarding gender, 63.8% of respondents identified as female, 34.4% identified as male, 1.4% identified as genderqueer, and 0.4% identified as transgender. A gender variable was then constructed from the composite of these two measures.

As demonstrated in Table 1, 97.5% of the sample is cis-female and 98.0% is cis-male, meaning that their sex at birth and current gender identity align. However, as Table 1 also reveals, several respondents identified a gender identity apart from the gender binary, and just over 1% of the sample indicated a gender identity within the gender binary that was trans from their disclosed sex at birth (i.e., being born male but claiming female as a gender identity or vice versa). In the gender composite variable, these respondents are labeled transgender, while cis-females are labeled female and cis-males are labeled male. The gender variable used throughout the analysis, thus, indicates that 63.6% of the sample population is female, 34.1% is male, and 2.3% is transgender.

Sexual Identity

Sexual identity was measured primarily though three dimensions: self-identification, desire, and behavior. Self-identification refers to the terms or labels that people use to identity their sexual preferences where gender is concerned. Thus, self-identification may be more commonly referred to as sexual orientation. Respondents were asked to choose the term or label that best corresponded to their own sexual identity. The list of possible answers included some duplicates (e.g., gay and homosexual) as well as a text box for those who indicated “other,” signifying that none of the terms corresponded to their understanding of their own sexual identity. The vast

Table 1 Cross tabulation of sex at birth by gender identity

	Sex at birth	
Gender identity	*Female*	*Male*
Female	97.5%	0.6%
Genderqueer	1.7	0.7
Male	0.7	98.0
Transgender	0.3	0.7
	100.0%	100.0%
	(*N* = 1343)	(*N* = 716)

$\chi^2 = 1982.96$, $df = 3$, $p < .001$
Cramer's $V = 0.98$

majority of gay and lesbian respondents seemed to prefer these terms rather than homosexual (which less than 0.4% of the sample population chose), while straight respondents were split almost evenly between those who identified as straight (36.3%) and those who identified as heterosexual (36.9%). For the purposes of data analysis, all straight and heterosexual identified respondents were collapsed into a single category (straight, 74.8% of the total sample). The male and female gay respondents were also collapsed into distinct categories, respectively (gay, 8.2% of the sample; lesbian, 5.5% of the sample). Other responses included bisexual (7.7%) and queer (3.8%). Table 2 displays the gender composition of these five sexual identities, which are used throughout this analysis.

Roughly 50 respondents chose to write in their own sexual identity by selecting other. From these responses, the following three sexual identity categories emerged: asexual ($N = 10$), curious ($N = 19$), and pansexual ($N = 17$). Asexuality references a person who admittedly has no sexual desires or interests or who chooses to abstain from all sexual activity. Curious is indicative of a straight-identified individual who is curious about and possibility interested in a same-gender sexual encounter. Pansexual refers to an individual who is open to all forms of sexual expression, regardless of gender. While very little is empirically known about these groups of people, they were ultimately deleted from the final analysis due to their relatively low frequency in the sample population. Even so, the study of these groups of people has the potential to offer much insight about sexuality and sexual identity, and research of this nature must be sensitive to the variance and complexity of sexual self-identification.

Table 2 Cross tabulation of gender composite by sexual identity

	Sexual identity				
Gender	*Bisexual*	*Gay*	*Lesbian*	*Straight*	*Queer*
Female	79.4%	0.0%	95.5%	66.4%	56.6%
Male	17.4	97.0	0.0	33.3	13.2
Transgender	3.2	3.0	4.5	0.3	30.3
	100.0%	100.0%	100.0%	100.0%	100.0%
	(*N* = 155)	(*N* = 166)	(*N* = 110)	(*N* = 1506)	(*N* = 76)

Note: Table for descriptive purposes only; no statistical tests calculated.

> H1: Controlling for gender identity, gay respondents will report first same-gender attractions at an earlier age than lesbians, bisexuals, or queer-identified respondents.

In order to compare findings related to the purposive sampling of LGBQ respondents, it is first necessary to compare the results of measures that have been used reliably in past studies in order to establish a type of assumed LGBQ sample normality. The mean age at which lesbian, gay, bisexual, and queer (LGBQ) respondents first remembered having same-gender desires was just under 12 years old. An analysis of variance revealed significant differences in the age at which LGBQ respondents indicated first remembered feeling same-gender desires ($F[10, 495] = 10.50$, $p < .001$), thus indicating support for Hypotheses 1. Gay men reported remembering same-gender desires at the youngest average age (9.88), while bisexual respondents had the oldest average age (13.68) in first remembering such attractions. Lesbian and queer respondents reported 11.87 and 11.43, respectively, as the first age at which they remembered feeling same-gender desires. Dunnett's T3 post-hoc tests revealed significant difference between gay male and lesbian female respondents as well as between bisexual female and gay male respondents.

> H2: Controlling for gender identity, gay respondents will report disclosure of same-gender sexuality at an earlier age than lesbians, bisexuals, or queer-identified respondents.

The mean age at which LGBQ respondents first disclosed their same-gender sexuality to another person was 17 years old, with only bisexual transgender respondents indicating a significantly different age (33.40 years). An analysis of variance revealed significant differences in the age at which LGBQ respondents indicated first remembered feeling same-gender desires ($F[10, 488] = 5.99$, $p < .001$), thus indicating initial support

for Hypotheses 2. However, Dunnett's T3 post-hoc tests failed to demonstrate any significant between group differences, thus calling into question support for the second hypothesis.

RQ3: What role, if any, does technology play in disclosure of minority sexual identities?

LGBQ respondents identified a multitude of ways in which they first shared their same-gender attractions with others. A majority of LGBQ respondents identified face-to-face conversations as the means for first sharing this information. In spite of this, mediated communication still played a significant role in how LGBQ respondents first went about first disclosing this information. As Table 3 shows, while face-to-face conversation was the most popular method of first disclosure, online chatting, telephone conversations, and emails were all also prevalent methods. As Table 3 also shows, mediated communication was particularly important for gay-identified respondents, many of whom relied on technology to first share their same-gender attractions/desires with other people.

RQ4: What is the relationship between sexual desire and sexual identification?

Desire was measured using two variables that gauged gender attraction and the appeal of a same-gender sexual experience. Table 4 displays gender attractions for different sexual identities by gender. Since missing cases accounted for fewer than 5% of total cases, mean substitutions for sexual identity by gender were imputed. While these data indicate that a relationship between sexual identity and attraction certainly exists, Table 4 also reveals that sexual identification is not a perfect measure of attraction (F[12, 2,000] = 1,215.50, $p < .001$). Bisexual respondents are a good illustration of precisely this

Table 3 Cross tabulation of sexual identity by method of first disclosure of same-gender attractions or desires

	Method of first disclosure							
Sexual identity	*Face-to-face conversation*	*Instant message/ online chat*	*Telephone conversation*	*Email*	*Text message*	*Skype/online video*	*I have not shared this info*	*Other*
Bisexual	30.8%	19.0%	26.1%	27.3%	27.3%	0.0%	87.5%	47.8%
Gay	31.9	49.2	17.4	27.3	18.2	100.0	12.5	30.4
Lesbian	22.9	17.5	30.4	18.2	27.3	0.0	0.0	13.0
Queer	14.4	14.4	26.1	27.3	27.3	0.0	0.0	8.7
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	(*N*=367)	(*N*=63)	(*N*=23)	(*N*=11)	(*N*=11)	(*N*=1)	(*N*=8)	(*N*=23)

Note: Table for descriptive purposes only; no statistical tests calculated.

Table 4 One-way analysis of variance of attraction by sexual identity and gender

	Attraction		
Sexual ID	*Mean*	*SD*	*N*
Bisexual			
Female	2.75	0.71	123
Male	2.81	0.88	27
Trans	3.60	0.55	5
Gay			
Female			
Male	1.24	0.43	161
Trans	1.80	0.84	5
Lesbian			
Female	4.56	0.57	105
Male			
Trans	4.00	0.71	5
Straight			
Female	1.32	0.57	1000
Male	4.86	0.49	501
Trans	3.60	1.95	5
Queer			
Female	3.35	0.87	43
Male	2.30	1.25	10
Trans	3.17	1.03	23
F			1,215.50
η^2			.88
Significance			$p < .001$

N = 2,013, *df1* = 12, *df2* = 2,000.
Responses were coded as 1 = *only men*, 2 = *mostly men*, 3 = *both men and women*, 4 = *mostly women*, 5 = *only women*.

point. Most people have a common understanding of the term bisexual: Generally, we assume that this term describes someone who is attracted to both men and women. While this assumption is likely true, the degree of this attraction is not clear from identification alone. For instance, both bisexual men and women display a mean attraction that favors attraction to men. Though these findings are indicative only of the nature of the sample population, they nonetheless highlight the complexity of thinking about sexual identities.

The appeal of a same-gender sexual encounter was also used as a measure of desire. Again, since missing cases accounted for less than 5% of total cases, mean substitutions for sexual identity by gender were imputed. As Table 5 illustrates, these data display a relatively strong relationship between sexual identity and appeal of this scenario ($F[12, 2{,}000] = 380.38$, $p < .001$). However, ample variance exists throughout responses to suggest once again that sexual identities are not as stable as they are often assumed to be. This idea is particularly exemplified by the straight respondents, many of whom indicated the idea of a same-gender sexual encounter as somewhat or very appealing. This measure, thus, serves as an empirical testament to the complex and reductionist nature of categorization based on gender attraction alone. Namely, these categories do not permit the fluidity that these data suggest exists empirically.

RQ5: What is the relationship between sexual behavior and sexual identification?

As it related to sexual identity, sexual behavior was measured by asking respondents to report the number of sex partners of each gender they have had throughout their lives. Data from these variables also displayed the variance that is seen throughout other measures of sexual identity. Once again, mean substitutions for sexual identity by

Table 5 One-way analysis of variance of appeal of having sex with a person of the same-gender by sexual identity and gender

	Appeal		
Sexual ID	*Mean*	*SD*	*N*
Bisexual			
Female	3.72	0.48	123
Male	3.63	0.49	27
Trans	3.80	0.45	5
Gay			
Female			
Male	3.98	0.18	161
Trans	4.00	0.00	5
Lesbian			
Female	3.96	0.31	105
Male			
Trans	3.60	0.89	5
Straight			
Female	1.72	0.84	1000
Male	1.21	0.53	501
Trans	1.80	1.30	5
Queer			
Female	3.77	0.48	43
Male	3.60	0.97	10
Trans	3.83	0.39	23
F			380.38
η^2			.70
Significance			$p < .001$

N = 2,013, *df1* = 12, *df2* = 2,000.
Responses were coded as 1 = *not at all appealing*, 2 = *not appealing*, 3 = *somewhat appealing*, 4 = *very appealing*.

gender were imputed since missing cases accounted for less than 5% of cases. While a relationship between the number of male or female partners and sexual identity clearly exists, this relationship alone does not account for the variance seen in this population. For instance, over 30% of gay respondents indicate having had at least one female sex partner at some point in their lives, and almost half of the lesbian population reported having at least one male sex partner. Furthermore, straight respondents also indicated several incongruities in disclosing the number and gender of their sex partners. Roughly 5% of straight-identified females and 3% of straight-identified males indicated at least one same-gender sexual experience; in some cases, straight-identified respondents listed multiple same-gender partners.

Figures 2, 3, and 4 display the means for the number of female, male, and lifetime sex partners by sexual identity. Transgender bisexual respondents reported the largest number of female sex partners on average, though the reliability of this statistic is called into question by the relatively low number of respondents in this category and a large standard deviation. Straight and queer male respondents indicated the second and third most female partners on average, respectively, followed by lesbian respondents who reported having roughly five female sex partners. Gay men indicated having the most male sex partners, followed closely by queer men. Each group of respondents reported an average number of male sex partners in the 20s. Male bisexual respondents indicated just approximately 11 male sex partners on average, and queer females reported the fourth highest average number of male partners on average at around 10. It is important to note

relatively large standard deviations indicate the large degree of variance that exists throughout the sample regarding the number of sex partners.

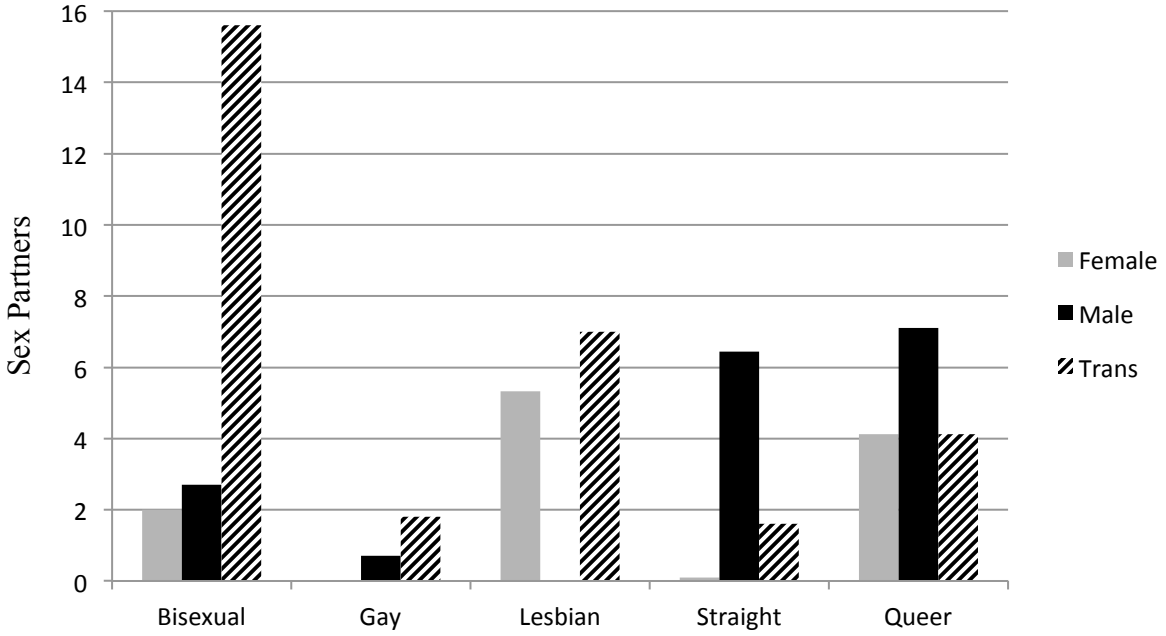


Figure 2. Mean number of female sex partners by sexual identity and gender.

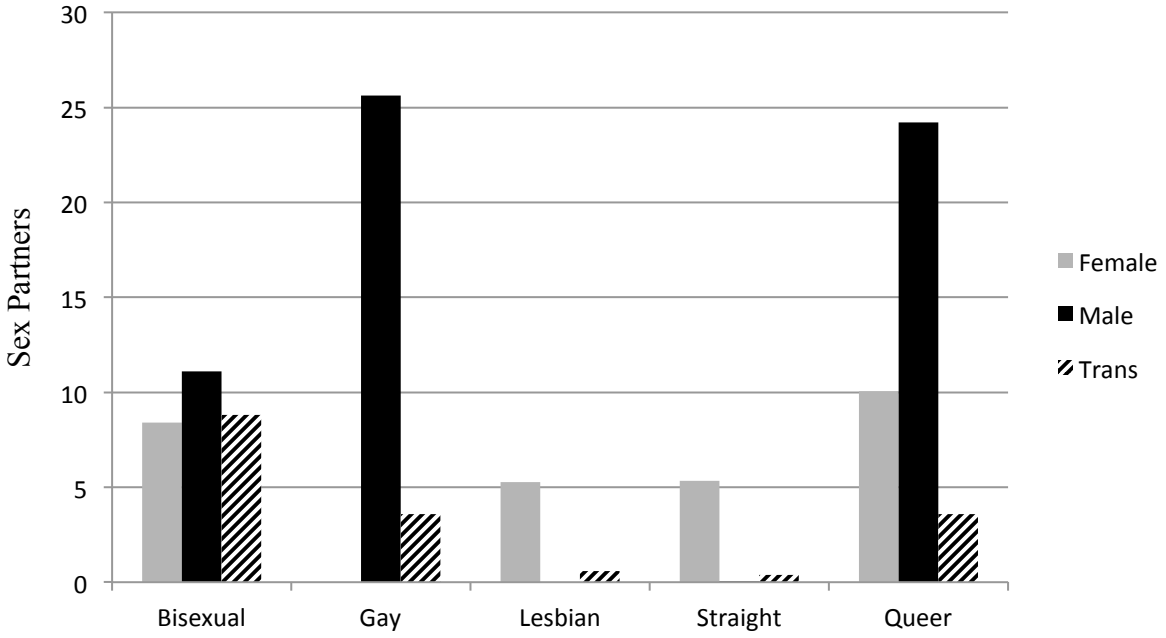


Figure 3. Mean number of male sex partners by sexual identity and gender.

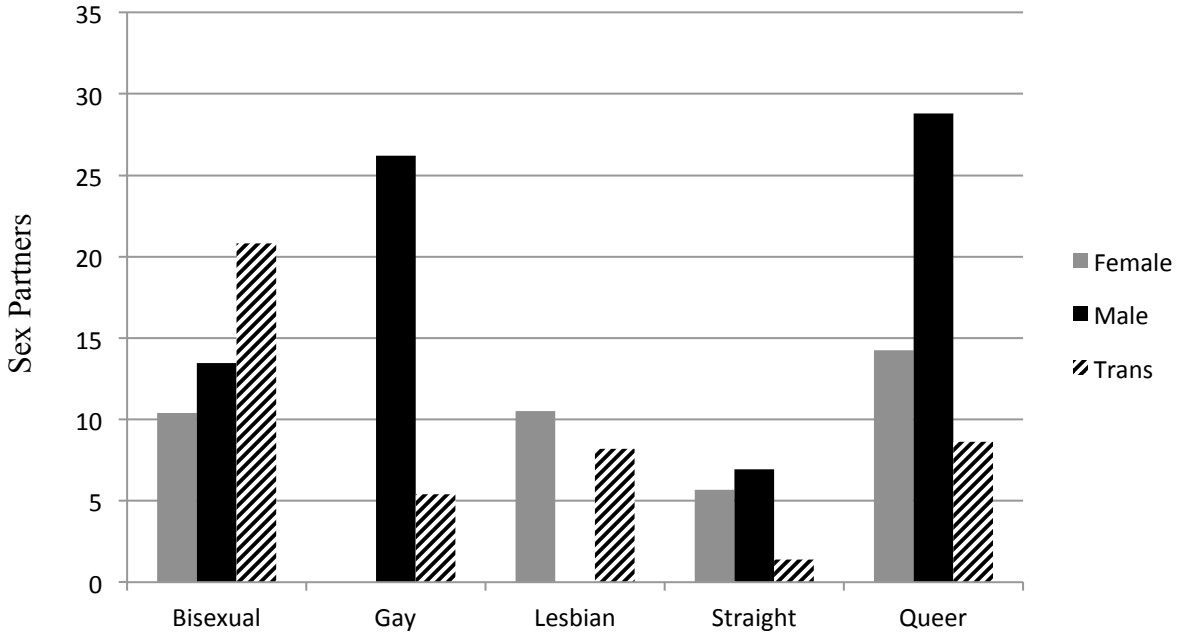


Figure 4. Mean number of lifetime sex partners by sexual identity and gender.

H3: Controlling for gender identity, gay respondents will report more lifetime sexual partners than lesbians, bisexuals, or queer-identified respondents.

An analysis of variance was used to test the relationship between the number of lifetime sexual partners and sexual identity. The results from the *F*-test indicate significant between group differences in the number of lifetime sex partners ($F[12, 2{,}000] = 31.81$, $p < .001$). Overall, queer males reported the highest number of partners, and gay men reported the second highest number of partners. Straight trans respondents indicated the lowest number of lifetime sex partners. Figure 4 offers a summary of the mean number of lifetime sex partners by sexual identity and gender. Dunnett's T3 post-hoc tests reveal several significant between group differences for gay male respondents, including bisexual, lesbian, straight, and queer female as well as gay and queer trans and straight male respondents. Thus, while there were no significant between group differences between gay, bisexual, or queer male respondents, the amount of other significant between group differences (for gay male respondents, in particular) indicates empirical support for Hypothesis 3.

Queer Empiricism

So far, it is apparent that though sexual identity is not a perfect predictor of sexual desire and behavior, it is nonetheless a fairly good indicator of these dimensions of sexuality. For instance, though a straight-identified man may have had a sexual experience with another man or though a straight-identified woman may find the thought of a same-gender sexual encounter appealing, in general the concept of sexual identity seems to be able to account for the majority of respondents' sexual desires and behaviors.

Yet, as previously discussed, there exists sufficient variance between these dimensions to suggest that sexual identity, though good, is an incomplete measure. This study now turns toward the exploration of a measure of sexual identity that takes into account the incongruity that can exist between self-identification, desire, and behavior.

Interrelation of Same-Gender Sexual Desire, Behavior, and Self-Identification

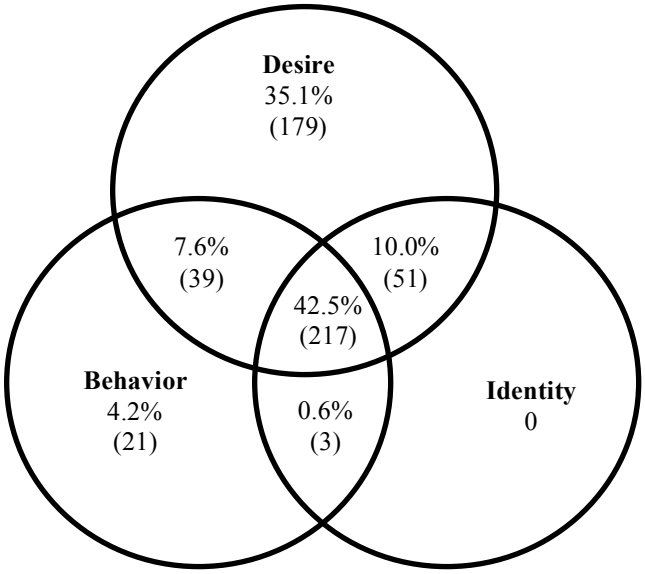
> RQ6: What is the relationship between sexual self-identification, desire, and behavior?

In order to explore the relationship between sexual identification, desire, and behavior, each was first dichotomously coded to indicate its presence or absence. Same-sex behavior was defined by the indication of any same-gender sexual partner. Same-sex desire was defined by attraction and appeal. Any indication of attraction to the same sex or any indication of finding a same-gender sexual encounter appealing indicated a presence of desire. Same-sex sexual identity is composed of those respondents who self-identified as gay, lesbian, bisexual, or queer.

Figures 5 and 6 display the interrelation of same-gender sexual behavior, identity, and desire for respondents who indicated any same-gender sexuality. As these diagrams show, same-gender sexual behavior, desire, and identity correlate in 79.4% of men and 42.5% of women who indicated any same-gender sexuality. These numbers are relatively high on account of the purposive nature of this sample; previous studies (e.g., Laumann et al., 1994) indicate that the incidence of this overlap is much lower in the general population. Yet even with this study's focus on the oversampling of lesbian, gay, and bisexual populations, these dimensions do not perfectly correlate. This, then, reiterates the fluidity of sexuality and the limitations of relying on terms related to self-identification alone to study this phenomenon.

Sizable percentages of this sample, thus, would be excluded from further analysis if we only included those respondents who self-identified as lesbian, gay, bisexual, or

(a) Women



(b) Men

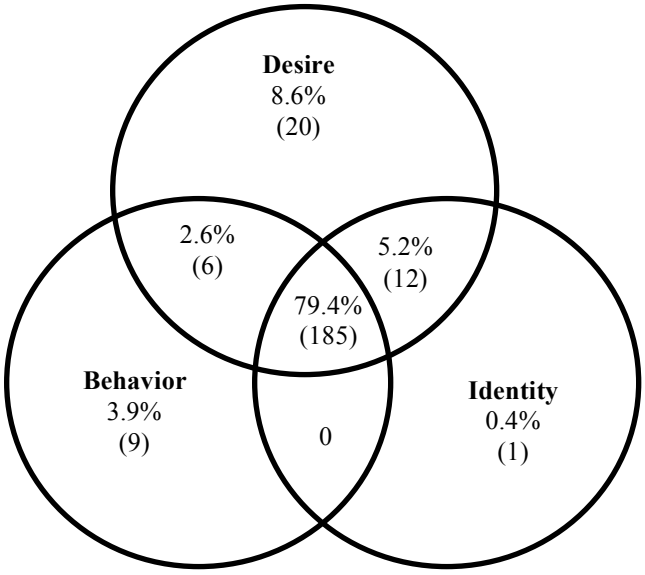
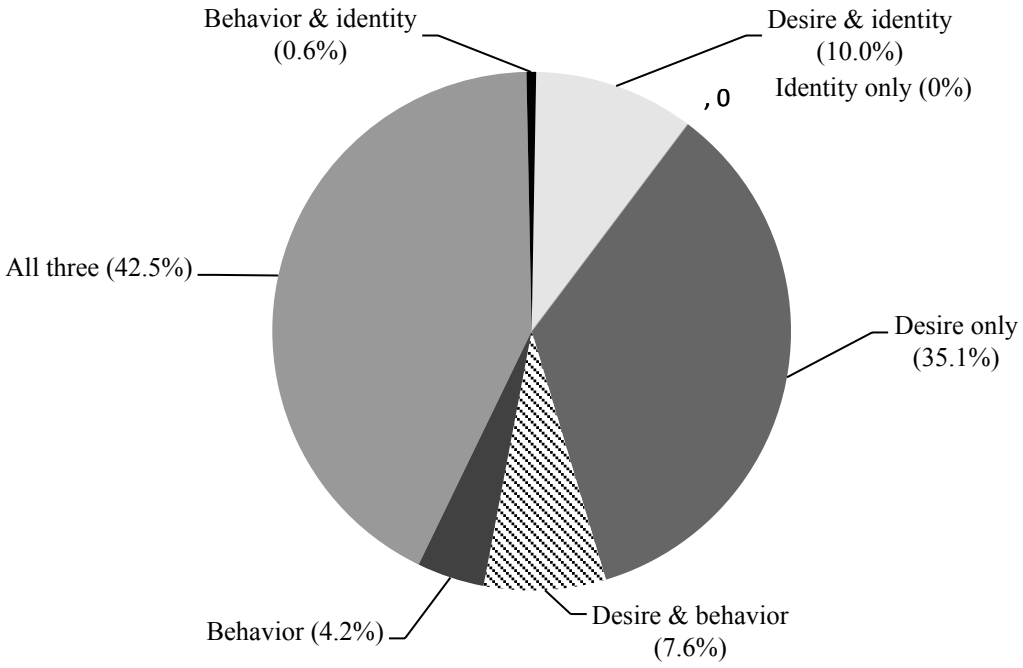


Figure 5. Interrelation of same-gender sexual behavior, identity, and desire. (a) for 510 women (40.1% of the total 1,271) who indicated any same-gender sexuality. (b), for 233 men (33.3% of the total 699) who indicated any same-gender sexuality.

(a) Women



(b) Men

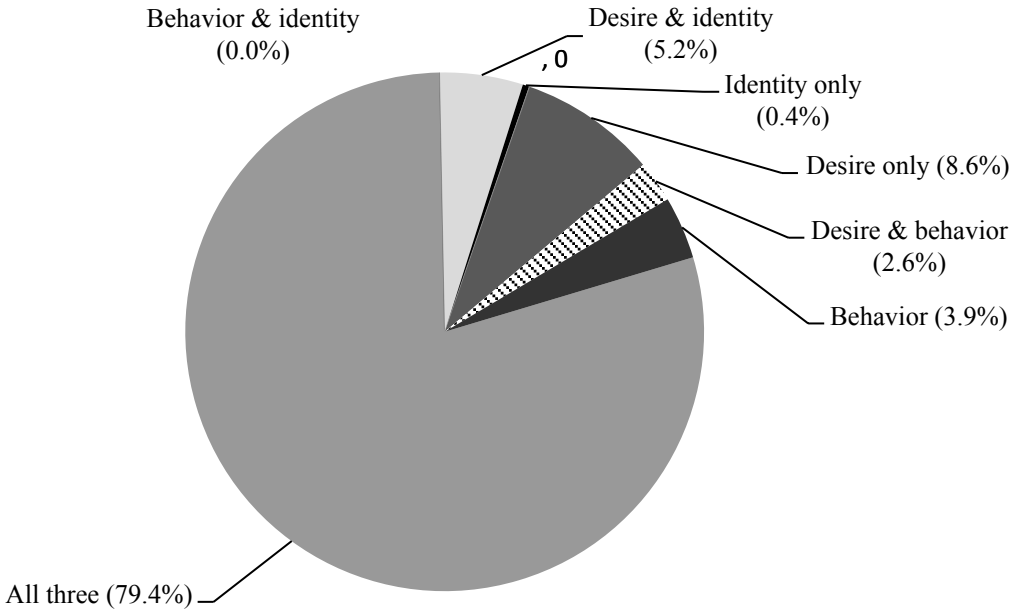


Figure 6. Interrelation of different aspects of same-gender sexuality. (a), for 510 women (40.1% of the total 1,271) who indicated any same-gender sexuality. (b), for 233 men (33.3% of the total 699) who indicated any same-gender sexuality.

queer and who also indicated same-gender sexual desire as well as same-gender sexual behavior. Notably, almost 60% of women and over 20% of men indicating some form of same-gender sexuality would be lost. Thus, in order to include these respondents, a measure that takes all three dimensions of same-gender sexuality into account must be devised. There is no standardized way to go about doing this, and a review of empirical studies focused on the measurement of same-gender sexuality shows that researchers usually concentrate on a single aspect of same-gender sexuality rather than all three. Many studies focus on behaviors and sex partners, often ignoring the complexity that self-identification and desire add to studying same-gender sexuality.

One way to account for the variance in the different dimensions of same-gender sexuality is to construct a variable that displays the degree of interrelation among these dimensions. This variable, then, would be similar to a scale whereby respondents who have reported some aspect of same-gender sexuality could be ranked low (one out of three dimensions), medium (two out of three dimensions) or high (three out of three dimensions). Similar scales have been popular in the past (e.g., the Kinsey scale), but these scales do not account for the differences between having same-gender sexual desires, having had a same-gender sexual experience, and self-identifying as lesbian, gay, bisexual, or queer (not to mention the variance that exists in all the possible ways these dimensions might interrelate). To assign indiscriminate scores to those respondents indicating any same-gender sexuality without an attempt to contextualize their dimensional differences, therefore, is to disregard the complexity of sexuality as a social

phenomenon. Furthermore, a scale approach to sexual identity assumes a sexual bipolarity whereby we risk segregating those respondents whose sexual histories, desires, and identities preclude them from the binary.

Queer Factor

> RQ6: How can the incongruity between sexual self-identification, behavior, and desire be taken into account in a single empirical measure?

Research Question 6 inquires about the possibility of an empirical measure to account for the incongruity that exists between the different dimensions of sexuality. It is this question that is taken up presently. In contrast to scales, a different approach to addressing the variance in the different dimensions of sexuality is to consider the ways in which respondents deviate from norms based on self-identification. This method differs considerably from classic scale measurements of sexuality in that it does not presuppose a spectrum of sexual identity whereby a respondent may exhibit solely opposite-gender sexuality, solely same-gender sexuality, or some combination of these types of sexuality. Rather, it relies on terms of self-identification to indicate the degree to which self-reported data on desire and behavior deviate from what is expected of a person of a given sexual identity. While respondents may still demonstrate exclusively same-gender or exclusively opposite-gender sexualities, this measure does not assume that these two sexualities compose either ends of a bipolar scale. Instead, it relies on the incongruities between respondents' sexual desires, behaviors, and self-identification in order to measure the degree to which these dimensions correlate. Since the construction of this measure is highly influenced by the idea of queerness as a term that describes a phenomenon that deviates from or is contrary to a stated or implied social norm, it is labeled the queer factor.

Since the construction of this measure is based on perceived incongruities, it is first necessary to establish normative and anti-normative perceptions of different sexual behaviors and desires for the host of sexual identity terms used throughout this analysis. Relying on a pre-test of approximately 60 respondents, a survey was used to measure the degree of perceived incongruity for various sexual identity- behavior and sexual identity-desire scenarios. A four-point, forced-choice Likert scale was used, which required respondents to determine the degree to which a particular scenario was expected or unexpected, given the respondents' assumptions about what it means to claim a specific sexual identity. Results from this pre-test were then used to evaluate whether instances of sexual identity-behavior and sexual identity-desire in the sample population were incongruous and, if so, the degree to which they were perceived as incongruous.

Tables 6, 7, 8, 9, and 10 display the means and modes for the expectancy of different types of attractions and behaviors for bisexual, gay, lesbian, straight, and queer individuals. Higher values signify a higher perception of expectancy, whereas lower values signify a higher perception of incongruity. A mean of 2 or less suggests that respondents found the paired sexual identity-behavior or sexual identity-desire anti-normative given their knowledge of what it means to claim and, therefore, enact a specific sexual identity. A mean of 1 corresponded with a high degree of perceived incongruity between sexual identity and behavior or desire.

Table 6 displays the expectancy data for bisexual individuals. Respondents found most behaviors and desires fell within their expectation of what it means to claim a bisexual identity with a few notable exceptions. In this case, polarity played a big factor in how bisexual desire was perceived. For example, bisexual desire that was focused

Table 6 Means, standard deviations, and modes for expectancy of bisexual attractions and behaviors

Variables	*Mean*	*SD*	*Mode*	*N*
A bisexual man who is attracted to men and women.	3.75	0.62	4	12
A bisexual man who is attracted to mostly women.	2.67	0.65	3	12
A bisexual man who is attracted to mostly men.	2.81	0.40	3	16
A bisexual man who is attracted to only men.	2.25	0.86	2	16
A bisexual man who has had both male and female sex partners.	3.07	1.03	3	15
A bisexual woman who is attracted to men and women.	3.58	0.52	4	12
A bisexual woman who is attracted to only women.	2.17	0.79	2	18
A bisexual woman who is attracted to only men.	2.17	0.86	2	18
A bisexual woman who is attracted to mostly men.	2.80	0.68	3	15
A bisexual woman who is attracted to mostly women.	2.67	0.72	3	15
A bisexual transgender individual who is attracted to mostly women.	2.56	0.71	3	18
A bisexual transgender individual who is attracted to both men and women.	3.33	0.69	3	18
A bisexual transgender individual who has had both male and female sex partners.	3.50	0.51	3	18
A bisexual transgender individual who has had no female or male sex partners.	2.53	0.74	3	15
A bisexual transgender individual who has had only female sex partners.	2.53	0.74	3	15
A bisexual transgender individual who has had only male sex partners.	2.50	0.52	2	16

Note: 1 = *very unexpected*, 2 = *unexpected*, 3 = *expected*, 4 *very expected*.

Table 7 Means, standard deviations, and modes for expectancy of gay attractions and behaviors

Variables	*Mean*	*SD*	*Mode*	*N*
A gay man who is attracted to mostly men.	3.58	0.67	4	12
A gay man who is attracted to only men.	3.83	0.39	4	12
A gay man who has had only female sex partners.	1.75	1.14	1	12
A gay man who has had both male and female sex partners.	2.92	0.67	3	12
A gay man who has had more than one female sex partner.	2.67	0.77	3	18
A gay man who has had one female sex partner.	2.93	0.46	3	15
A gay man who has had one or more male sex partners.	3.20	1.01	4	15
A gay man who has had only male sex partners	3.20	0.86	3	15
A gay man who has had no male sex partners.	1.94	0.77	2	16
A gay transgender individual who is attracted to mostly men.	3.25	0.45	3	12
A gay transgender individual who is attracted to only men.	3.00	0.76	3	15
A gay transgender individual who has had only female sex partners.	2.33	0.77	2	18
A gay transgender individual was has had one or more female sex partners.	3.00	0.49	3	18
A gay transgender individual who has had one or more male sex partners.	3.39	0.50	3	18
A gay transgender individual who is attracted to both men and women.	2.67	0.72	3	15
A gay transgender individual who has had both male and female sex partners.	2.81	0.40	3	16

Note: 1 = *very unexpected*, 2 = *unexpected*, 3 = *expected*, 4 *very expected*.

Table 8 Means, standard deviations, and modes for expectancy of lesbian attractions and behaviors

Variables	*Mean*	*SD*	*Mode*	*N*
A lesbian woman who is attracted to mostly women.	3.58	0.67	4	12
A lesbian woman who is attracted to both men and women.	2.25	0.75	2	12
A lesbian woman who has had only female sex partners.	3.33	0.78	4	12
A lesbian woman who has had more than one male sex partner.	2.56	0.71	3	18
A lesbian woman who has had no female sex partners.	2.00	0.76	2	15
A lesbian woman who has had one male sex partner.	2.93	0.46	3	15
A lesbian woman who is attracted to only women.	3.75	0.44	4	16
A lesbian woman who has had both male and female sex partners.	3.06	0.80	3	18
A lesbian transgender individual who is attracted to only women.	2.93	0.88	3	15
A lesbian transgender individual who has had one male sex partner.	2.87	0.35	3	15
A lesbian transgender individual who is attracted to mostly women.	3.06	0.57	3	16
A lesbian transgender individual who has had more than one male sex partner.	2.42	0.67	2	12
A lesbian transgender individual who is attracted to both men and women.	2.39	0.85	3	18
A lesbian transgender individual who has had only female sex partners.	2.81	0.54	3	16
A lesbian transgender individual who has had both male and female sex partners.	2.81	0.40	3	16

Note: 1 = *very unexpected*, 2 = *unexpected*, 3 = *expected*, 4 *very expected*.

Table 9 Means, standard deviations, and modes for expectancy of straight attractions and behaviors

Variables	*Mean*	*SD*	*Mode*	*N*
A straight man who has had both male and female sex partners.	2.17	1.03	2	12
A straight man who has had more than one male sex partner.	1.67	0.89	1	12
A straight man who is attracted to mostly men.	1.50	0.62	1	18
A straight man who has had one male sex partner.	2.17	0.79	2	18
A straight man who is attracted to mostly women.	3.33	0.90	4	15
A straight man who is attracted to only men.	1.47	0.74	1	15
A straight man who is attracted to only women.	3.81	0.40	4	16
A straight man who is attracted to both men and women.	1.88	0.62	2	16
A straight man who has had no sex partners.	1.88	0.96	1	16
A straight man who has had only female sex partners.	3.75	0.45	4	12
A straight woman who has had one female sex partner.	2.72	0.58	3	18
A straight woman who has only male sex partners.	3.33	1.01	4	15
A straight woman who is attracted to only men.	3.88	0.34	4	16
A straight woman who is attracted to mostly men.	3.31	0.48	3	16
A straight woman who is attracted to mostly women.	2.19	0.83	2	16
A straight woman who has had more than one female sex partner.	2.00	0.89	1	16
A straight woman who has had no sex partners.	2.19	0.83	2	16
A straight woman who is attracted to both men and women.	2.17	0.71	2	18
A straight woman who has had both male and female sex partners.	2.75	0.87	2	12
A straight transgender individual who is attracted to mostly men.	2.39	0.85	3	18
A straight transgender individual who is attracted to only women.	2.50	0.52	2	16
A straight transgender individual who is attracted to only men.	2.47	0.83	3	15
A straight transgender individual who has had only male sex partners.	2.47	0.83	3	15
A straight transgender individual who has had both male and female sex partners.	2.89	0.58	3	18
A straight transgender individual who has had one female sex partner.	3.08	0.29	3	12
A straight transgender individual who has had more than one female sex partner.	2.88	0.50	3	16

Note: 1 = *very unexpected*, 2 = *unexpected*, 3 = *expected*, 4 *very expected*.

Table 10 Means, standard deviations, and modes for expectancy of queer attractions and behaviors

Variables	*Mean*	*SD*	*Mode*	*N*
A queer male who is attracted to both men and women.	2.58	0.79	3	12
A queer male who has had both male and female sex partners.	3.08	0.52	3	12
A queer male who has had no sex partners.	2.28	0.90	3	18
A queer male who has had only female sex partners.	2.13	0.74	2	15
A queer male who is attracted to only men.	3.31	0.70	3	16
A queer male who is attracted to mostly men.	3.13	0.81	3	16
A queer male who is attracted to only women.	1.88	0.72	2	16
A queer male who has had only male sex partners.	3.13	0.62	3	16
A queer female who is attracted to mostly men.	1.92	0.67	2	12
A queer female who has had only female sex partners.	3.25	0.45	3	12
A queer female who has had no sex partners.	2.42	0.90	2	12
A queer female who is attracted to only women.	3.50	0.51	3	18
A queer female who is attracted to mostly women.	3.40	0.74	4	15
A queer female who is attracted to both men and women.	2.93	0.80	3	15
A queer female who has had only male sex partners.	2.27	0.80	3	15
A queer female who has had both male and female sex partners.	2.94	0.94	3	18
A queer transgender individual who has had no sex partners.	2.42	0.67	2	12
A queer transgender individual who is attracted to only men.	2.92	0.52	3	12
A queer transgender individual who is attracted to only women.	2.78	0.73	3	18
A queer transgender individual who is attracted to mostly men.	2.83	0.62	3	18
A queer transgender individual who has had only male sex partners.	2.56	0.62	3	18
A queer transgender individual who is attracted to mostly women.	2.56	0.51	3	16
A queer transgender individual who is attracted to both men and women.	2.73	0.96	3	15
A queer transgender individual who has had both male and female sex partners.	2.73	0.88	3	15
A queer transgender individual who has had only female sex partners.	2.56	0.51	3	16

Note: 1 = *very unexpected*, 2 = *unexpected*, 3 = *expected*, 4 *very expected*.

exclusively on one gender was perceived as incongruous, as well as was a bisexual individual who has only had sex partners of a single gender. The expectancy of bisexuality, thus, is attraction to and sexual experience with both men and women, though the degree of attraction is seemingly insignificant.[2]

Table 7 displays the expectancy data for gay male individuals. Overall, respondents found a man who identifies as gay but has had only female sex partners to be very incongruous, while they found gay men who have had no sex partners and transgender individuals who identify as gay who have had only female sex partners to be incongruous. This, then, highlights respondents' expectations regarding gay individuals: namely, that they are sexually active and have had sexual encounters with at least one other man.

Table 8 displays the expectancy data for lesbian individuals. Respondents found lesbian women (cis or trans) who are attracted to both men and women and lesbian women who have had no female sex partners to be incongruous. Respondents also found lesbian trans-women who have had more than one male sex partners to be incongruous; interestingly, however, they did not arrive at the same conclusion for lesbian cis-women who have had multiple male sex partners. Respondents, thus, indicated an expectation that lesbian individuals are sexually active with other women, attracted mostly or only to

[2] See, for example, measures like "a bisexual man who is attracted to mostly women," "a bisexual woman who is attracted to mostly men," etc. Interestingly, means for measures like these were always below 3 ("expected"), though above 2.5 (halfway between "unexpected" and "expected"). A larger sample size may indicate that bisexual individuals attracted mostly to one gender correlate with a degree of perceived incongruity.

women, and, in the case of transgender individuals, have not had more than one male sex partner.[3]

Table 9 displays the expectancy data for straight individuals. Many of the straight male and straight female behaviors and desires that deviated from opposite-gender sexuality resulted in perceived incongruity. Overall, respondents found straight men who have had more than one male sex partner, straight men who are mostly or only attracted to men, and straight men who have had no sex partners to be very incongruous. They also found straight men who have had both male and female sex partners, straight men who have had one male sex partner, and straight men who are attracted to both men and women to be incongruous. Furthermore, respondents found straight women who are attracted to mostly women, straight women who have had more than one female sex partner, straight women who are attracted to both men and men, and straight women who have had both female and male sex partners to be incongruous with expectations. Expectations for straight transgender individuals varied considerably, with respondents identifying straight transgender individuals who are attracted to mostly men and only women to be incongruous.

Table 10 displays the expectancy data for queer-identified individuals. Since queer is a term that encompasses many different meanings, it is unsurprising that respondents identified few incongruities between identification and behaviors or desires. In this case, respondents mainly identified behaviors and desires that mimicked opposite-gender sexuality as incongruous. For example, respondents found queer men who are attracted to only women and queer women who are attracted to mostly men to be

[3] It is important to note that for the measure "A lesbian woman who has had more than one male sex partner" the mean was 2.56, thus indicating that this behavior may have been perceived as incongruous in a larger sample.

incongruous with their beliefs about what queer as an identity label represents. Furthermore, respondents indicated perceived incongruity about queer men who have had no sex partners, queer men who have had only female sex partners, queer women who have had no sex partners, and queer transgender individuals who have no sex partners. Thus, the expectation is that people who adopt the label queer are sexually active in ways that do not resemble same-gender sexuality.

Queer factor scores were calculated by summing the total number of incongruous behaviors and desires as determined by the mean expectancy scores. Behaviors and desires with means between 1.50 and 2.49 are labeled "incongruous" and behaviors and desires with a mean of less than 1.50 are labeled "very incongruous." Incongruous behaviors and desires resulted in the addition of one degree to respondents' queer factor score, while those behaviors and desires that are coded "very incongruous" resulted in the addition of two degrees to respondents' queer factor score. Thus, the queer factor score is the sum of measured observations of perceived incongruity for each respondent.

Table 11 shows the distribution of queer factor scores by sexual identity. In this sample, there were three degrees of incongruity, with zero degrees representing no deviation from expected sexual behavior and desire, one degree representing one deviation, and two degrees representing two deviations. A majority of second-degree queer factor deviation was seen in bisexual female and male respondents. This observation is likely a reflection of indicating a sexual identity that respondents have not yet acted on in either reporting no sexual partners or only sexual partners of one gender. Respondents, thus, tended to equate the disclosure of a sexual identity with sexual

experience; the lack thereof—regardless of which sexual identity was disclosed—was in most cases perceived

Table 11 Cross tabulation of queer factor by sexual identity and gender

	Queer Factor				
Sexual ID	*0 degrees*	*1 degree*	*2 degrees*		
Bisexual					
Female	63.4%	30.1%	6.5%	100.0%	(*N*=123)
Male	59.3%	37.0%	3.7%	100.0%	(*N*=27)
Trans	80.0%	20.0%	0.0%	100.0%	(*N*=5)
Gay					
Female	--	--	--		
Male	96.3%	3.7%	0.0%	100.0%	(*N*=161)
Trans	100.0%	0.0%	0.0%	100.0%	(*N*=5)
Lesbian					
Female	74.3%	25.7%	0.0%	100.0%	(*N*=105)
Male	--	--	--		
Trans	80.0%	20.0%	0.0%	100.0%	(*N*=5)
Straight					
Female	80.1%	18.7%	1.2%	100.0%	(*N*=1000)
Male	83.8%	15.2%	1.0%	100.0%	(*N*=501)
Trans	0.0%	100.0%	0.0%	100.0%	(*N*=5)
Queer					
Female	79.1%	20.9%	0.0%	100.0%	(*N*=43)
Male	70.0%	20.0%	10.0%	100.0%	(*N*=10)
Trans	91.3%	8.7%	0.0%	100.0%	(*N*=23)

as incongruous. Moving forward, queer factor scores will be an important point of consideration in examining sexual behaviors, particularly for those behaviors that are perceived as socially deviant.

CHAPTER 5: TECHNOSEXUALITY

Technosexuality is a concurrent examination of measures related to technology use and sexuality. Since no existing measures account for the convergence of these constructs, new measures were devised. Before examining these measures and their relationship to sexuality and technology use, I first offer an overview of the makeup of the responednts, including a brief presentation of relevant demographic characteristics, as well as their average technology use across a variety of platforms.

Table 12 displays the means and percentages of the characteristics of the sample population. The average age was roughly 25 (with a large standard deviation of about 8 years), and the average education was 3.5 years of college. A majority of respondents were white (73.1%), single (54.2%), liberal (66.0%), and reported attending religious services less than 5 times per year. Other popular relationship responses included in a relationship (27.9%) and married (10.9%). A majority of the sample described their primary residence as either urban (35.2%) or suburban (26.9%). Income, a variable that is thought to highly influence technology use, was measured as well, but it was ultimately deleted from the analysis due to a high rate of non-response (which was 10% for personal or individual income and over 16% for reported annual household income).

Respondents were asked about the frequency with which they use different kinds of technological devices. Table 13 shows the means and standard deviations for technology use. Overall, respondents used laptop computers most frequently, followed by smartphones and cell phones. Respondents reported using the internet an average of 8 hours per day, with their time divided nearly evenly between work related activities and personal affairs. Respondents indicated receiving more text messages than they sent on

Table 12 Means and percentages of sample population characteristics

Variables	*Mean*	*SD*	*Percentage*	*N*
Age*	24.76	8.06	-	2013
Education*	15.56	2.02	-	2013
Religiosity**	2.46	1.70	-	2013
Race	-	-		2013
Asian			8.9	
Black			4.2	
Latino			3.1	
Mixed			8.6	
White			73.1	
Other			2.1	
Relationship Status	-	-		2013
Single (never married)			54.2	
In a relationship			27.9	
Married			10.9	
Partnered			5.1	
Divorced			1.8	
Political Standing	-	-		2013
Liberal			66.0	
Moderate			17.8	
Conservative			10.7	
Other			5.8	
Primary Residence Description	-	-		2013
Rural			5.6	
Small town			12.8	
Suburban			26.9	
Urban			35.2	
Other			9.4	

* Responses given in years; for *Education*, 12 = *high school graduate*.
** Responses were coded 1 = *never*, 2 = *less than 5 times per year*, 3 = *5-11 times per year*, 4 = *once per month*, 5 = *2-3 times per month*, 6 = *once per week*, 7 = *multiple times per week*.

Table 13 Means and standard deviations for technology use

Variables	*Mean*	*SD*	*N*
Desktop computer use during a typical week*	2.86	1.18	2013
Laptop computer use during a typical week*	4.64	0.79	2013
Table use during a typical week*	2.30	0.78	2013
Cellular phone use during a typical week*	3.16	1.32	2013
Smartphone use during a typical week*	3.73	1.41	2013
Internet use total on a typical day**	8.04	5.78	2013
Internet use for work-related activities on a typical day**	4.62	4.34	2013
Internet use for personal affairs on a typical day**	4.16	3.92	2013
Text messages sent on a typical day	41.02	93.30	2013
Tex messages received on a typical day	44.06	103.31	2013
Number of smartphone apps	20.32	30.77	1397
Time spent using smartphone apps on a typical day***	45.22	77.53	1397
Time spent using web browser on smartphone on a typical day***	33.27	63.94	1397

*Responses were coded 5 = *very frequently*, 4 = *frequently*, 3 = *occasionally*, 2 = *rarely*, 1 = *not at all*.
**Responses given in hours.
***Responses given in minutes.

average (44 to 26, respectively), though these numbers were accompanied by very high standard deviations. Smartphone users, who composed about 67% of the sample, reported spending on average 45 minutes per day using smartphone applications and over 30 minutes using a smartphone-based web browser, though standard deviations for these figures were also quite large, thus indicating a wide degree of variance.

Technosexual Behaviors: Factors and Frequencies

> RQ6: What are the different categories of technosexual behaviors, and how frequently do respondents participate in them?

In order to answer this research question, an exploratory factor analysis of all the technosexual measures was conducted. Prior to this, however, device ownership and use had to be standardized for the sample. While all respondents owned or regularly used a computer and a mobile phone, this was not the case with smartphones. Thus, smartphone-mediated technosexual behaviors were measured in two groups: respondents who own smartphones and those who do not. For those respondents who did not report owning or regularly using a smartphone, these types of behaviors were measured in the hypothetical. Thus, respondents were asked to estimate how frequently they would participate in a given behavior if they did own a smartphone. Means for the two groups were then compared to see if the hypothetical and actual measures could be combined. Table 14 displays the results of *t*-tests for all 5 smartphone-mediated technosexual behaviors. However, since the *t*-test statistic is sensitive to large sample sizes, those behaviors with significant differences in means (3, 4, and 5) were re-examined using a random sample of 20% of respondents; results from this analysis did not reveal any significant between-group differences, thus, the two populations were combined for analysis.

Table 14 Independent *t*-tests for smartphone-mediated technosexual behaviors by smartphone ownership

	Smartphone ownership				
	Actual mean (& SD)	*Hypothetical mean (& SD)*			
Variables	*(N = 1349)*	*(N = 664)*	*t value*	*df*	*Significance*
SPTS1	1.16 (0.63)	1.11 (0.48)	1.81	2011	*ns*
SPTS2	1.55 (0.96)	1.56 (0.93)	0.22	2011	*ns*
SPTS3	1.77 (1.00)	1.94 (1.02)	3.55	2011	$p < .001$
SPTS4	1.27 (0.70)	1.18 (0.54)	2.91	2011	$p < .01$
SPTS5	1.07 (0.35)	1.15 (0.46)	4.32	2011	$p < .001$

Note: SPTS 1 = *Search for sexual partners using a smartphone application*, SPTS2 = *To view pornographic materials*, SPTS3 = *To search for information on sex*, SPTS4 = *Meet someone with whom you then had sex*, SPTS5 = *Engage in Web-based video sex*. Responses were coded as 5 = *very frequently*, 4 = *frequently*, 3 = *sometimes*, 2 = *rarely*, 1 = *never*.

Tables 15, 16, and 17 display correlation matrixes for all the technosexual measures in the study. Table 15 displays coefficients for computer-mediated and mobile phone-mediated technosexual behaviors. Table 16 displays coefficients for computer-mediated and smartphone-mediated technosexual behaviors. Finally, Table 17 displays coefficients for mobile phone-mediated and smartphone-mediated technosexual behaviors. Table 18 displays the factor loadings for all the technologically mediated sexual behaviors. An oblique rotation revealed no significant correlation between the resulting factors, thus a varimax orthogonal rotation was used to extract 5 factors accounting for 65.69% of the variance in the sample. Only those items with coefficients ≥ 0.40 were considered for factor construction.

Arousal played a decisive role in the way in which factors loaded. Each factor fell into one of three categories of arousal: partnered-arousal, solitary-arousal, and non-arousal. Factor 1 is composed of six partnered-arousal measures that pertain to seeking out potential dates and sex partners via websites, chatting or instating messaging with potential sex partners, meeting someone with whom respondents then had sex, and searching for sex partners using a smartphone application. Since these measures relate to the use of technology to search for romantic or sexual partners in the real world, Factor 1 is labeled Real-World-Partners-technosexuality, or Real-World-Partner-TS, and explains roughly 35% of sample variance.

Factor 2 is composed of five partnered-arousal measures that pertain to the sending and receiving of sexually explicit text messages and photographs as well as the sending or posting of nude photographs of oneself via the web. Thus, Factor 2 is named Photo-technosexuality, or Photo-TS, and explains roughly 12% of the variance.

Table 15 Zero-order bivariate correlation matrix for computer-mediated and mobile phone-mediated technosexual behaviors

		1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*
1	Seek out potential dates (for example, via dating Websites)	1.00													
2	Seek out potential sex partners (via Websites intended for this purpose)	0.55	1.00												
3	Chat or instant message with potential sex partners	0.32	0.37	1.00											
4	E-mail or send nude or sexually explicit photographs or videos of yourself	0.24	0.42	0.34	1.00										
5	Post to the Web a nude or sexually explicit video of yourself	0.28	0.45	0.20	0.43	1.00									
6	Meet someone with whom you then had sex	0.42	0.50	0.43	0.31	0.27	1.00								
7	View pornographic materials	0.25	0.30	0.27	0.24	0.16	0.22	1.00							
8	Engage in Web-based video sex (engage in sexual acts while using Skype, etc.)	0.14	0.20	0.30	0.48	0.26	0.20	0.23	1.00						
9	Send sexually explicit text messages	0.10	0.19	0.34	0.43	0.16	0.21	0.21	0.37	1.00					
10	Receive sexually explicit text messages	0.12	0.19	0.36	0.41	0.18	0.22	0.21	0.36	0.93	1.00				
11	Send nude or sexually explicit photos of yourself	0.12	0.26	0.27	0.66	0.28	0.20	0.19	0.40	0.58	0.54	1.00			
12	Receive nude or sexually explicit photos	0.19	0.32	0.30	0.53	0.26	0.25	0.29	0.37	0.55	0.60	0.74	1.00		
13	Send nude or sexually explicit videos of yourself	0.11	0.25	0.13	0.41	0.39	0.19	0.12	0.29	0.31	0.29	0.50	0.44	1.00	
14	Receive nude or sexually explicit videos	0.17	0.28	0.20	0.35	0.34	0.22	0.16	0.28	0.33	0.34	0.41	0.54	0.70	1.00

Note: $p < .001$ for all coefficients, $N = 2{,}013$.

Table 16 Zero-order bivariate correlation for computer-mediated and smartphone-mediated technosexual behaviors

		1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*
1	Seek out potential dates (for example, via dating Websites)	1.00												
2	Seek out potential sex partners (via Websites intended for this purpose)	0.55	1.00											
3	Chat or instant message with potential sex partners	0.32	0.37	1.00										
4	E-mail or send nude or sexually explicit photographs or videos of yourself	0.24	0.42	0.34	1.00									
5	Post to the Web a nude or sexually explicit video of yourself	0.28	0.45	0.20	0.43	1.00								
6	Meet someone with whom you then had sex	0.42	0.50	0.43	0.31	0.27	1.00							
7	View pornographic materials	0.25	0.30	0.27	0.24	0.16	0.22	1.00						
8	Engage in Web-based video sex (engage in sexual acts while using Skype, etc.)	0.14	0.20	0.30	0.48	0.26	0.20	0.23	1.00					
9	Search for sexual partners using a smartphone application	0.46	0.70	0.34	0.37	0.34	0.41	0.29	0.21	1.00				
10	To view pornographic materials	0.16	0.27	0.21	0.18	0.14	0.18	0.53	0.16	0.34	1.00			
11	To search for information on sex	0.09	0.09	0.17	0.12	0.08	0.13	0.13	0.13	0.15	0.37	1.00		
12	Meet someone with whom you then had sex	0.36	0.48	0.39	0.30	0.25	0.61	0.18	0.18	0.53	0.28	0.25	1.00	
13	Engage in Web-based video sex	0.14	0.21	0.19	0.31	0.30	0.17	0.15	0.43	0.29	0.31	0.28	0.27	1.00

Note: $p < .001$ for all coefficients, $N = 2{,}013$.

Table 17 Zero-order bivariate correlation matrix for mobile phone-mediated and smartphone-mediated technosexual behaviors

		1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*
1	Send sexually explicit text messages	1.00										
2	Receive sexually explicit text messages	0.93	1.00									
3	Send nude or sexually explicit photos of yourself	0.58	0.54	1.00								
4	Receive nude or sexually explicit photos	0.55	0.60	0.74	1.00							
5	Send nude or sexually explicit videos of yourself	0.31	0.29	0.50	0.44	1.00						
6	Receive nude or sexually explicit videos	0.33	0.34	0.41	0.54	0.70	1.00					
7	Search for sexual partners using a smartphone application	0.17	0.18	0.25	0.32	0.24	0.27	1.00				
8	To view pornographic materials	0.19	0.19	0.16	0.27	0.14	0.20	0.34	1.00			
9	To search for information on sex	0.24	0.23	0.12	0.11	0.09	0.12	0.15	0.37	1.00		
10	Meet someone with whom you then had sex	0.23	0.24	0.21	0.27	0.18	0.23	0.53	0.28	0.25	1.00	
11	Engage in Web-based video sex	0.24	0.23	0.30	0.27	0.34	0.32	0.29	0.31	0.28	0.27	1.00

Note: $p < .001$ for all coefficients, $N = 2{,}013$.

Table 18 Factor loadings for technologically mediated sexual behaviors

Behaviors	*Factor 1 RWP*	*Factor 2 Photo*	*Factor 3 Video*	*Factor 4 Porn*	*Factor 5 SexInfo*
Seek out potential sex partners (via Websites intended for this purpose)	**0.77**	0.05	0.29	0.22	-0.08
Meet someone with whom you then had sex (comp)	**0.76**	0.18	0.06	-0.06	0.12
Meet someone with whom you then had sex (smartphone)	**0.72**	0.15	0.08	-0.04	0.34
Seek out potential dates (for example, via dating Websites)	**0.70**	0.01	0.09	0.16	-0.08
Search for sexual partners using a smartphone application	**0.70**	0.03	0.28	0.27	0.07
Chat or instant message with potential sex partners	**0.55**	0.42	-0.04	0.08	0.12
Send sexually explicit text messages	0.08	**0.90**	0.10	0.04	0.17
Receive sexually explicit text messages	0.10	**0.90**	0.09	0.05	0.16
Send nude or sexually explicit photos of yourself	0.08	**0.67**	0.50	0.08	-0.06
Receive nude or sexually explicit photos	0.15	**0.66**	0.46	0.22	-0.07
E-mail or send nude or sexually explicit photographs or videos of yourself	0.31	**0.48**	0.50	0.11	-0.06
Send nude or sexually explicit videos of yourself	0.04	0.20	**0.81**	-0.01	0.06
Receive nude or sexually explicit videos	0.10	0.24	**0.73**	0.06	0.08
Post to the Web a nude or sexually explicit video of yourself	0.37	0.00	**0.59**	0.03	0.01
Engage in Web-based video sex (smartphone)	0.11	0.08	**0.51**	0.09	0.58
Engage in Web-based video sex (performing sexual acts while using Skype on a computer, etc.)	0.12	0.40	**0.38**	0.10	0.20
View pornographic materials	0.20	0.18	0.04	**0.85**	-0.03
To view pornographic materials	0.14	0.07	0.10	**0.76**	0.41
To search for information on sex	0.08	0.14	-0.02	0.13	**0.81**
Eigenvalues	6.38	2.26	1.49	1.31	1.05
% of total variance accounted for	33.58	11.89	7.83	6.89	5.50
Chronbach's α	0.81	0.88	0.71	0.67	-

N = 2,013.

Note: RWP = Real world partner.

Factor 3 is composed of six partnered-arousal measures that include the sending and receiving of sexually explicit videos via a mobile phone, the sharing a nude video of oneself via the web, and the use of web-based video chatting program (e.g., Skype) to engage in sexual acts. Since all these measures pertain to video sex, the third factor is labeled Video-technosexuality, or Video-TS, and explains about 8% of the variance.

Factor 4 relates to the viewing of pornographic media content via a computer, laptop, or smartphone device. These behaviors differ from the other three factors in that they are solitary-arousal behaviors. Since this factor is composed of measures that deal with exposure to pornography, Factor 4 is labeled Pornographic-technosexuality, or Porn-TS, and accounts for nearly 7% of the variance in the sample.

Factor 5, the final factor, is composed of only one measure: the use of a smartphone to search for information about sex. Thus, Factor 5 is labeled Sex-Info-technosexuality, or Sex-Info-TS. Unlike the other factors, Sex-Info-TS is a non-arousal sexual behavior, indicating that the primary intention is not arousal or immediate sexual gratification. Figure 7 summarizes the different components of these behaviors as they relate specifically to technology as well as arousal type.

Participation in technosexual behaviors was relatively infrequent. Table 19 displays the means and standard deviations for frequency of participation by factor. Porn-TS had the highest frequency of participation, and Video-TS had the lowest. Means for all five factors fell in the range of occurring rarely to never. Tables 20, 21, 22, and 23 display how the characteristics (age, education, religiosity, and relationship status) of the sample population affect technosexulity.[4] In general, these demographic measures do not

[4] Analyses were conducted for race and residence type as well, but analyses of variance for these variables failed to produce any significant results.

	Behavior	*Device*	*Arousal*
Real-World-Partners-TS	Seek out potential sex partners (via Websites intended for this purpose)	Computer	Partnered
	Meet someone with whom you then had sex (computer)	Computer	Partnered
	Meet someone with whom you then had sex (smartphone)	Smartphone	Partnered
	Seek out potential dates (for example, via dating Websites)	Computer	Partnered
	Search for sexual partners using a smartphone application	Smartphone	Partnered
	Chat or instant message with potential sex partners	Computer	Partnered
Photo-TS	Send sexually explicit text messages	Phone	Partnered
	Receive sexually explicit text messages	Phone	Partnered
	Send nude or sexually explicit photos of yourself	Phone	Partnered
	Receive nude or sexually explicit photos	Phone	Partnered
	Engage in Web-based video sex (performing sexual acts while using Skype on a computer, etc.)	Computer	Partnered
Video-TS	Send nude or sexually explicit videos of yourself	Phone	Partnered
	Receive nude or sexually explicit videos	Phone	Partnered
	Post to the Web a nude or sexually explicit video of yourself	Computer	Partnered
	Engage in Web-based video sex (smartphone)	Smartphone	Partnered
	E-mail or send nude or sexually explicit photographs or videos of yourself	Computer	Partnered
Porn-TS	View pornographic materials	Computer	Solitary
	To view pornographic materials	Smartphone	Solitary
Sex-Info-TS	To search for information on sex	Smartphone	Non

Figure 7. Technosexual factors by arousal and technology components.

Table 19 Means and standard deviations for technosexual behaviors by factor

Factor	*Mean*	*SD*	*N*
RWP-TS	1.32	0.55	2013
Photo-TS	1.60	0.71	2013
Video-TS	1.12	0.31	2013
Porn-TS	2.02	1.01	2013
Sex-Info-TS	1.82	1.01	2013

Responses were coded as 5 = *very frequently*, 4 = *frequently*, 3 = *sometimes*, 2 = *rarely*, 1 = *never*.

Table 20 Technosexuality regressed on age, N =2,013

Variables	*RWP-TS* β	*Photo-TS* β	*Video-TS* β	*Porn-TS* β	*Sex-Info-TS* β
Age	0.08	-0.13	-0.04	0.01	-0.12
F value	11.88**	31.74***	3.54	0.13	30.93***
Total R^2	.01	.02	.00	.00	.02
Adj. R^2	.01	.02	.00	.00	.02

** p < .01*** p < .001; *df1* = 12, *df2* = 2,000.

Table 21 Technosexuality regressed on education, N =2013

Variables	*RWP-TS* β	*Photo-TS* β	*Video-TS* β	*Porn-TS* β	*Sex-Info-TS* β
Education	0.08	-0.07	-0.02	0.04	-0.10
F value	11.29**	8.45**	0.93	3.91*	21.17***
Total R^2	.01	.00	.00	.00	.01
Adj. R^2	.01	.00	.00	.00	.01

* p < .05, ** p < .01, *** p < .001; *df1* = 12, *df2* = 2,000.

Table 22 Technosexuality regressed on religious attendance, N =2013

Variables	*RWP-TS* β	*Photo-TS* β	*Video-TS* β	*Porn-TS* β	*Sex-Info-TS* β
Attendance	-.03	-.09	-.03	-.15	-.04
F value	1.47	15.84***	1.98	45.74***	3.39
Total R^2	.00	.01	.00	.02	.00
Adj. R^2	.00	.01	.00	.02	.00

* p < .05, ** p < .01, *** p < .001; *df1* = 12, *df2* = 2,000.

Table 23 One-way analysis of variance for technosexuality by relationship status

	Relationship Status							
Behaviors	*Single mean (SD)*	*In a Relationship mean (SD)*	*Married mean (SD)*	*Partnered mean (SD)*	*Divorced mean (SD)*	*F*	η^2	*Significance*
RWP-TS	1.39 (0.59)	1.26 (0.47)	1.13 (0.42)	1.24 (0.52)	1.58 (0.83)	15.86	.03	$p < .001$
Photo-TS	1.55 (0.68)	1.84 (0.75)	1.25 (0.50)	1.58 (0.74)	1.50 (0.70)	31.70	.06	$p < .001$
Video-TS	1.11 (0.28)	1.18 (0.35)	1.06 (0.30)	1.13 (0.27)	1.18 (0.44)	7.70	.02	$p < .001$
Porn-TS	2.06 (1.03)	1.99 (0.97)	1.80 (0.93)	2.25 (1.01)	1.97 (1.15)	4.65	.01	$p < .01$
SexInfo-TS	1.87 (1.03)	1.92 (1.04)	1.54 (0.86)	1.51 (0.84)	1.46 (0.77)	10.11	.02	$p < .001$

df1 = 12, *df2* = 2,000.

Responses were coded as 5 = *very frequently*, 4 = *frequently*, 3 = *sometimes*, 2 = *rarely*, 1 = *never*.

Table 24 Dunnett's T3 significant post-hoc tests for Real-World-Partner-TS by relationship status

Relationship Status	*Significant Group Difference*	*Mean Difference*	*Significance*
Single	In a relationship	0.13	$p < .001$
	Married	0.26	$p < .001$
In a relationship	Married	0.12	$p < .01$
Divorced	Married	0.44	$p < .05$

Table 25 Dunnett's T3 significant post-hoc tests for Photo-TS by relationship status

Relationship Status	*Significant Group Difference*	*Mean Difference*	*Significance*
Single	Married	0.30	$p < .001$
In a relationship	Single	0.28	$p < .001$
	Married	0.58	$p < .001$
	Partnered	0.25	$p < .05$
Partnered	Married	0.33	$p < .01$

Table 26 Dunnett's T3 significant post-hoc tests for Video-TS by relationship status

Relationship Status	*Significant Group Difference*	*Mean Difference*	*Significance*
In a relationship	Single	0.07	$p < .01$
	Married	0.12	$p < .001$

Table 27 Dunnett's T3 significant post-hoc tests for Porn-TS by relationship status

Relationship Status	*Significant Group Difference*	*Mean Difference*	*Significance*
Single	Married	0.26	$p < .01$
Partnered	Married	0.45	$p < .01$

Table 28 Dunnett's T3 significant post-hoc tests for Sex-Info-TS by relationship status

Relationship Status	*Significant Group Difference*	*Mean Difference*	*Significance*
Single	Married	0.33	$p < .001$
	Partnered	0.36	$p < .01$
	Divorced	0.41	$p < .05$
In a relationship	Married	0.38	$p < .001$
	Partnered	0.41	$p < .001$
	Divorced	0.46	$p < .05$

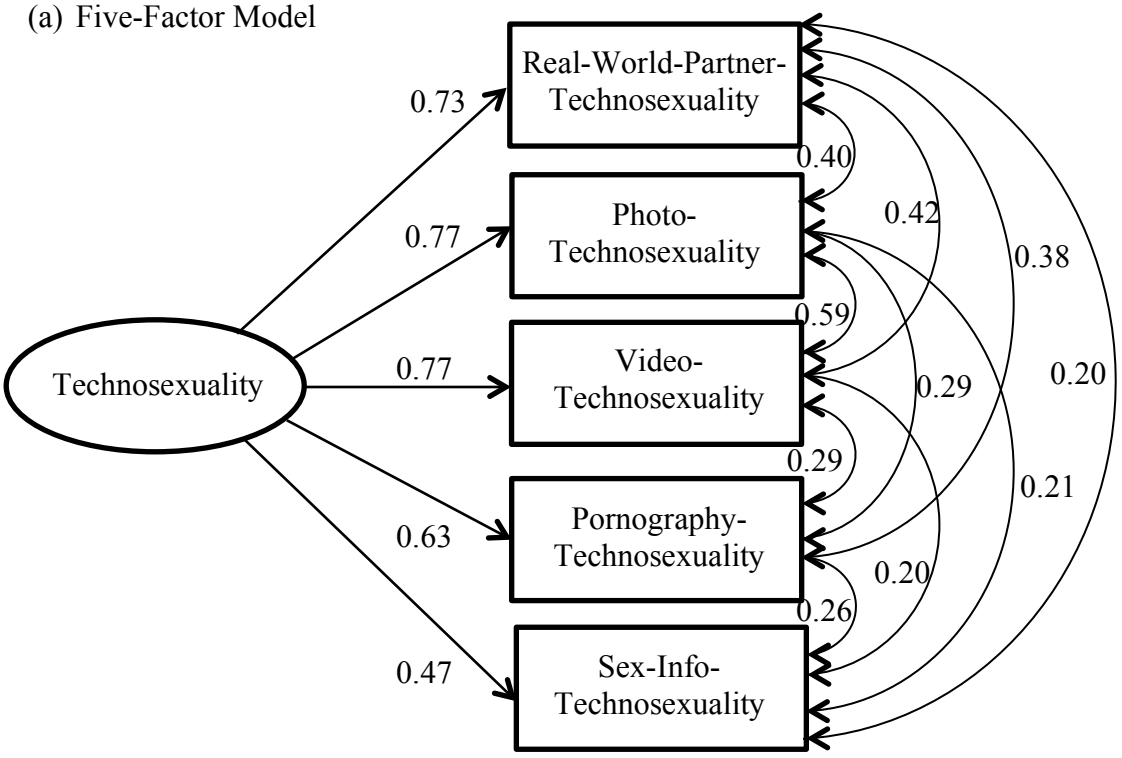
seem to drastically alter technosexual participation. Though variables like age and religiosity affected participation in expected ways (i.e., younger respondents were more likely to participate in technosexuality than older respondents; respondents attending religious services more frequently were less likely to participate than those who attended less frequently), the coefficients of determination for these relationships were uniformly small. The notable exception to this conclusion is relationship status, which demonstrated a more sizable effect on participation in technosexual behaviors. Single respondents were more likely to participate in Real-World-Partner-TS and Porn-TS than respondents in a relationship. Respondents in a relationship, in turn, were more likely than single respondents to participate in Photo-TS and Video-TS. Tables 24, 25, 26, 27, and 28 display the results of Dunnett's T3 post-hoc analyses for each of the technosexual factors under consideration.

> RQ7: What is the relationship between technosexual behaviors across different technological platforms?

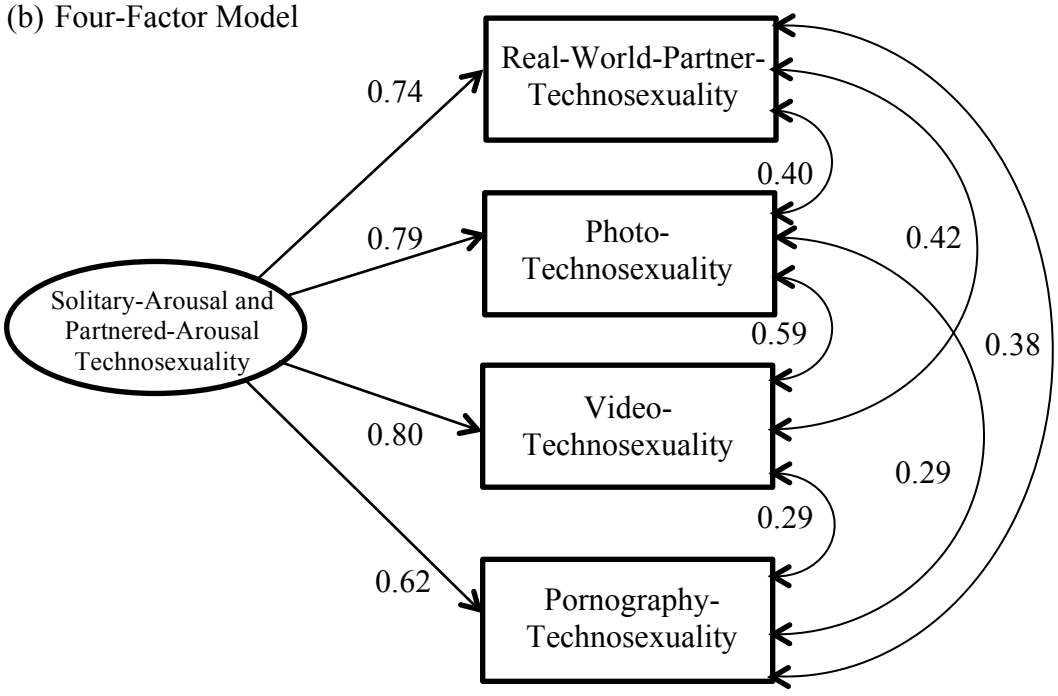
As demonstrated in Figure 7, most of the factors (aside from Sex-Info-TS) display some combination of the three different devices under consideration in this study. This indicates, thus, that technosexuality is more defined by the behaviors than it is by the vehicle for them. It is notable, however, that though most factors contained some combination of technological platforms, technology was a defining component in 2 technosexual factors: Photo-TS and Video-TS. These factors must be scrutinized further in order to investigate their relationship with other variables and measures, particularly those related to sexual attitudes, desires, needs, and identities.

Figure 8 displays three measurement models for the latent variable technosexuality. In Figure 8(a), the five technosexual factors do not highly correlate.

(a) Five-Factor Model



(b) Four-Factor Model



(c) Three-Factor Model

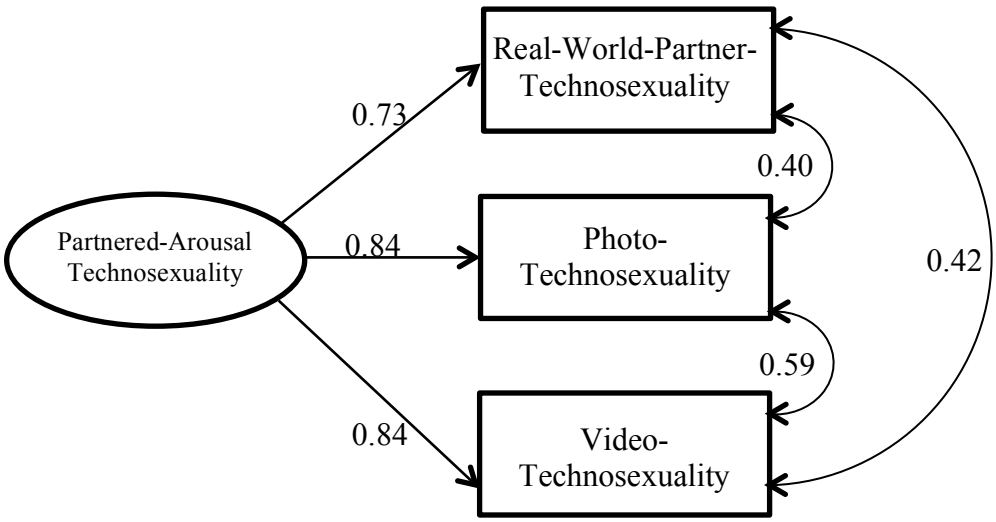


Figure 8. Technosexuality measurement models. (a) Includes all non-arousal, solitary-arousal, and partnered-arousal activiteis. (b) Includes solitary-arousal and partnered-arousal activites. (c) Includes only partnered-arousal activites.

Photo-TS and Video-TS share the highest correlation, while Sex-Info-TS is responsible for some of the model's lowest coefficients. This is expected given the arousal types of the factors. Overall, with the exception of Sex-Info-TS, the factors load moderately-to-highly on the latent variable technosexuality. Excluding Sex-Info-TS results in higher loading factors for the other behaviors as well as an increased percentage of variance explained. Figure 8(b) displays a measurement model for the latent variable technosexuality excluding Sex-Info-TS. The factor loadings for the partnered-arousal measures increase in this model, suggesting it is a better measurement of the construct under consideration. Eliminating Porn-TS, the sole solitary-arousal factor, from the measurement model results in even better loadings for the partnered-arousal activities (Real-World-Partner-TS, Photo-TS, and Video-TS), as shown in Figure 8(c).

Sociosexuality and Technosexuality

> H4: As respondents' sexuality becomes more unrestricted, the more they will participate in technosexual behaviors.

In order to test this relationship, technosexuality was regressed on sociosexual orientation (SSO). Because classic measures of sociosexual orientation take into account respondents' number sex partners in the last year as well as the number of sex partners respondents had sex with on one and only one occasion, these two items will be entered as controls in multivariate analyses. Additionally, frequency of masturbation and gender identity are also used as control measures. Technosexual measures and sociosexual orientation are first tested at the bivariate level before control measures are entered in blocks. For all regression models, linear independence was evaluated using the variance

inflation factor (VIF) for multicollinearity. Normality and homoscedasticity were assessed using skewness, kurtosis, and scatter plots in SPSS.[5]

Table 29 displays standardized and unstandardized coefficients for partnered-arousal technosexual behaviors regressed on sociosexual orientation. Sociosexual orientation is a significant predictor of frequency of participation in Photo-TS in both the bivariate and the multivariate models. In the multivariate model it is the most significant predictor followed by frequency of masturbation, sex partners in the last year, and gender. Overall the multivariate model accounts for about 11% of the variance in the sample. Sociosexual orientation is also significant in the bivariate and multivariate models in predicting participation in Real-World-Partner-TS. For the multivariate model, sociosexual orientation is the most significant predictor, followed by the number of one-time sex partners and sex partners in the last year. Gender and frequency of masturbation were also significant predictors. Overall, the multivariate model accounts for about 23% of the variance in Real-World-Partner-TS. Sociosexual orientation is again a significant predictor for participation in Video-TS. In the multivariate model, the number of one-time sex partners is the largest predictor of Video-TS with sociosexual orientation as the second largest. The number of sex partners in the last year was also a significant predictor. Overall this model explains a mere 5% of the variance in the sample population.

Table 30 displays unstandardized and standardized coefficients for solitary-arousal and non-arousal technosexual behaviors regressed on sociosexual orientation. Sociosexual orientation is a significant predictor of Porn-TS in both the bivariate and

[5] Video-TS was the only factor to display extreme violations of normality. A log transfer was performed on the but was ultimately was rejected for failure to ameliorate the variable's violation of normality.

Table 29 Partnered-arousal technosexual behaviors regressed on sociosexual orientation, $N = 2{,}013$

Variables	*Real-World-Partner-TS*				*Photo-TS*				*Video-TS*			
	Model 1		*Model 2*		*Model 1*		*Model 2*		*Model 1*		*Model 2*	
	b	*β*	*b*	*β*	*b*	*β*	*b*	*β*	*b*	*β*	*b*	*β*
SSO	0.12*** (0.01)	0.37	0.07*** (0.01)	0.22	0.11*** (0.01)	0.28	0.08*** (0.06)	0.20	0.04*** (0.00)	0.20	0.02*** (0.01)	0.11
Sex partners last year			0.02*** (0.00)	0.16			0.02*** (0.00)	0.12			0.01** (0.00)	0.08
One-time sex Partners			0.01*** (0.00)	0.20			0.00* (0.00)	0.05			0.00** (0.00)	0.07
Masturbation[1]			0.02** (0.01)	0.07			0.04*** (0.01)	0.13			0.01** (0.00)	0.07
Gender (0 = male)			-0.10*** (0.03)	-0.09			0.17*** (0.04)	0.12			-0.02 (0.02)	-0.03
Intercept	0.80***		0.81***		1.11***		0.87***		0.97***		0.98***	
F value	322.35***		121.37***		164.72***		50.53***		79.86***		24.41***	
Total R^2	0.14		0.23		0.08		0.11		0.04		0.06	
Adj. R^2	0.14		0.23		0.08		0.11		0.04		0.06	
R^2 change			0.09***				0.04***				0.02***	

*$p < .05$, ** $p < .01$, *** $p < .001$; *df1* = 12, *df2* = 2,000.

1 = Responses were coded as 1 = *not at all*, 2 = *once or twice*, 3 = *3-11 times*, 4 = *once a month*, 5 = *2-3 times a month*, 6 = *weekly*, 7 = *2-3 times a week*, 8 = *4 times or more a week.*

Table 30 Solitary-arousal and non-arousal technosexual behaviors regressed on sociosexual orientation, $N = 2{,}013$

Variables	*Porn-TS*				*SexInfo-TS*			
	Model 1		*Model 2*		*Model 1*		*Model 2*	
	b	*β*	*b*	*β*	*b*	*β*	*b*	*β*
SSO	0.28*** (0.01)	0.48	0.12*** (0.01)	0.21	0.09*** (0.01)	0.15	0.10*** (0.01)	0.18
Sex partners last year			0.00 (0.00)	0.00			0.01* (0.01)	0.05
One-time sex partners			0.00 (0.00)	0.02			-0.01** (0.00)	-0.08
Masturbation[1]			0.16*** (0.01)	0.37			0.04** (0.01)	0.08
Gender (0 = male)			-0.56*** (0.04)	-0.26			0.38*** (0.05)	0.18
Intercept	0.81***		0.50***		1.44***		0.96***	
F value	594.16***		338.78***		47.88***		24.35***	
R^2	0.23		0.46		0.02		0.05	
Adj. R^2	0.23		0.46		0.02		0.05	
R^2 change			0.23***				0.03***	

*$p < .05$, ** $p < .01$, *** $p < .001$, $N = 2013$, *df1* = 12, *df2* = 2,000.
1: Responses were coded as 1 = *not at all*, 2 = *once or twice*, 3 = *3-11 times*, 4 = *once a month*, 5 = *2-3 times a month*, 6 = *weekly*, 7 = *2-3 times a week*, 8 = *4 times or more a week.*

multivariate models. In the multivariate model, which accounts for roughly 46% of the sample variance, it is the second largest predictor following gender. Sociosexual orientation is also a significant predictor of Sex-Info-TS. In the multivariate model, which accounts for just 5% of the variance, gender and sociosexual orientation are the largest predictors of Sex-Info-TS participation. Overall, sociosexual orientation is a significant indicator of participation in all technosexual behaviors. Furthermore, the observed relationships are positive, indicating that as sociosexual orientation increases so, too, does technosexual participation. Thus, based on these findings it is concluded that Hypothesis 4 is supported.

Deviance and Technosexuality

> H5: The more appealing respondents find taboo sexual behaviors and scenarios, the more likely they will be to participate in technosexual behaviors.

Hypothesis 5 proposes a relationship between technosexuality and other taboo sexual behaviors (e.g., Wilson & Medora, 1990) through their mutual social construction as deviant acts. Table 31 displays coefficients for technosexual behaviors regressed on the appeal of sexually deviant behaviors. These behaviors include anal sex (composed of sex items related to digital anal stimulation, anilingus, and penetrative anal sex), sex involving three people, and sex with an anonymous partner. As Table 31 demonstrates, controlling for gender identity, the appeal of these behaviors was generally positively related to participation in technosexual behaviors, although to varying degrees. For instance, the appeal of group sex was not a significant predictor in the case of Real-World-Partner-TS and Video-TS. Otherwise, however, appeal was positively predictive of technosexuality, even in the case of non-arousal activities. Notably, the regression models for Real-World-Partner-TS and Porn-TS explained high amounts of sample

Table 31 Technosexual behaviors regressed on appeal of other deviant sexual behaviors, $N = 2{,}013$

Variables	*Real-World-Partner-TS*		*Photo-TS*		*Video-TS*		*Porn-TS*		*Sex-Info-TS*	
	b	*β*	*b*	*β*	*b*	*β*	*b*	*β*	*b*	*β*
Anal sex	0.17***	0.26	0.13***	0.15	0.07***	0.18	0.27***	0.22	0.09**	0.07
	(0.02)		(0.02)		(0.01)		(0.02)		(0.03)	
Group sex	-0.01	-0.02	0.09***	0.14	0.02**	0.07	0.22***	0.24	0.08**	0.09
	(0.01)		(0.02)		(0.01)		(0.02)		(0.03)	
Anonymous sex	0.13***	0.23	0.07***	0.10	0.03**	0.08	0.12***	0.11	0.09**	0.08
	(0.01)		(0.02)		(0.01)		(0.02)		(0.03)	
Gender (0 = male)	-0.10***	-0.08	0.17***	0.11	-0.00	-0.00	-0.63***	-0.30	0.39***	0.18
	(0.03)		(0.04)		(0.02)		(0.04)		(0.05)	
Intercept	0.84***		0.90***		0.91***		0.58***		1.05***	
F value	107.05***		40.71***		36.41***		348.90***		20.47***	
Total R^2	0.18		0.08		0.07		0.41		0.04	
Adj. R^2	0.17		0.07		0.06		0.41		0.04	

*$p < .05$, ** $p < .01$, *** $p < .001$; *df1* = 12, *df2* = 2,000.

Appeal responses were coded as 1 = *not at all appealing*, 2 = *not appealing*, 3 = *somewhat appealing*, 4 = *very appealing*.

variance (17% and 41%, respectively), while the models for Photo-TS, Video-TS, and Sex-Info-TS accounted for lower amounts of variance. Overall, Table 31 indicates that Hypothesis 5 is supported.

RQ8: How do views on monogamy affect participation in technosexual behaviors?

In general, monogamy refers to remaining faithful to one person during the course of a sexual relationship. However, non-monogamous relationship styles exist, even though monogamy is still considered the norm when it comes to marriage and serious, long-terms romantic relationships. Views on monogamous and non-monogamous sexual arrangements, thus, may be useful for thinking about participation in technosexuality, particularly as the arrangements become more socially deviant (e.g., consensual non-monogamy and non-consensual non-monogamy).

Table 32 displays the coefficients for technosexual behaviors regressed on the infidelity and the appeal of different types of monogamous and non-monogamous relationships. As Table 32 indicates, the appeal of consensual non-monogamy was a predictor of technosexuality in all five models. As appeal of consensual non-monogamy increased, so, too, did technosexuality. Fidelity was a significant measure in three technosexual behaviors: Photo-TS, Real-World-Partner-TS, and Video-TS. In these cases those respondents who admitted to prior incidences of infidelity reported a higher degree of participation in technosexuality than those who did not. Overall, views on monogamy were not very strong indicator of technosexuality, though there was overlap in the incidence of infidelity, the appeal of certain styles of non-monogamy, and technosexuality.

Table 32 Technosexual behaviors regressed on infidelity and appeal of relationship types, $N = 2{,}013$

Variables	*Real-World-Partner-TS*		*Photo-TS*		*Video-TS*		*Porn-TS*		*Sex-Info-TS*	
	b	*β*	*b*	*β*	*b*	*β*	*b*	*β*	*b*	*β*
Monogamy	-0.09***	-0.09	0.01	0.01	-0.05**	-0.08	-0.04	-0.02	0.07	0.04
	(0.02)		(0.03)		(0.01)		(0.04)		(0.04)	
Consensual non-monogamy	0.09***	0.16	0.08***	0.12	0.04***	0.12	0.29***	0.29	0.14***	0.14
	(0.01)		(0.02)		(0.01)		(0.03)		(0.03)	
Non-consensual Non-monogamy	0.11***	0.11	0.09**	0.08	0.03*	0.05	0.06	0.03	0.00	0.00
	(0.02)		(0.03)		(0.01)		(0.04)		(0.04)	
Infidelity (0 = no infidelity)	-0.10***	-0.08	-0.31***	-0.20	-0.08***	-0.13	-0.08	-0.04	-0.00	-0.00
	(0.03)		(0.03)		(0.02)		(0.05)		(0.05)	
Intercept	1.51***		1.80***		1.34***		1.68***		1.26***	
F value	52.86***		42.64***		32.76***		57.51***		4.32**	
Total R^2	0.10		0.08		0.07		0.10		0.01	
Adj. R^2	0.09		0.08		0.06		0.10		0.01	

*$p < .05$, ** $p < .01$, *** $p < .001$; *df1* = 12, *df2* = 2,000.

Monogamy appeal responses were coded as 1 = *not at all appealing*, 2 = *not appealing*, 3 = *somewhat appealing*, 4 = *very appealing*.

Need Fulfillment and Technosexuality

H6: As the need for sexual satisfaction becomes more important, respondents will be more likely to participate in technosexual behaviors.

H7: As the need for nurturance becomes more important, respondents will be more likely to participate in technosexual behaviors, controlling for relationship status.

H8: As the need to discuss sexual experiences with friends becomes more important, respondents will be more likely to participate in technosexual behaviors, controlling for the need for collective self-esteem.

H9: As respondents' sexual self-conceptualizations increases, the more likely they will be to participate in technosexual behaviors.

H10: As the need to feel sexually desired becomes more important, respondents will be more likely to participate in technosexual behaviors.

Hypotheses 6, 8, 9, and 10 are all supported at the bivariate level ($p < .01$ or $p < .001$ for all behaviors). Hypothesis 7 was supported for three technosexual behaviors (Photo-TS, Porn-TS, and Sex-Info-TS) at the bivariate level ($p < .001$). However, since many of these needs may measure overlapping and related constructs, entering them in a single multivariate block and interpreting the results is more appropriate. For all models, relationship status and gender were entered as control measures.

Table 33 displays the coefficients for technosexual behaviors regressed on the importance of communal needs, relationship status, and gender. The results show that the importance of the need to discuss sexual experiences with friends and respondents' sexual self-conceptualizations were the largest and most reliable predictors of technosexuality across the arousal-oriented models. Sexual self-conceptualization was a larger predictor of participation than the need to discuss experiences with friends in every model except for Sex-Info-TS. The need for sexual satisfaction and nurturance were predictors of Real-World-Partner-TS, though nurturance was negatively correlated with

Table 33 Technosexual behaviors regressed on importance of communal needs, sexual-self-conceptualization, relationship status, and gender, $N = 2{,}013$

Variables	*Real-World-Partner-TS*		*Photo-TS*		*Video-TS*		*Porn-TS*		*Sex-Info-TS*	
	b	*β*	*b*	*β*	*B*	*β*	*b*	*β*	*b*	*β*
Sexual satisfaction	0.06** (0.02)	0.08	-0.00 (0.03)	-0.00	-0.00 (0.01)	-0.01	0.05 (0.04)	0.04	0.03 (0.04)	0.02
Nurturance	-0.06** (0.02)	-0.07	0.01 (0.03)	0.01	-0.01 (0.01)	-0.03	0.01 (0.04)	0.00	0.06 (0.04)	0.04
Discuss	0.09*** (0.02)	0.15	0.13*** (0.02)	0.17	0.05*** (0.01)	0.15	0.12*** (0.02)	0.11	0.17*** (0.03)	0.15
Desired	0.01 (0.02)	0.01	0.06* (0.03)	0.06	0.00 (0.01)	0.00	0.07* (0.03)	0.05	0.06 (0.04)	0.04
Collective self-esteem	0.04** (0.01)	0.06	-0.02 (0.02)	-0.02	-0.01 (0.01)	-0.02	0.00 (0.02)	0.00	-0.03 (0.03)	-0.02
Sexual self	0.12*** (0.02)	0.17	0.20*** (0.02)	0.22	0.07*** (0.01)	0.18	0.15*** (0.03)	0.12	0.10** (0.04)	0.08
Relationship st. (0 = single)	-0.14*** (0.02)	-0.13	0.10** (0.03)	0.07	0.04** (0.01)	0.06	-0.08* (0.04)	-0.04	-0.11* (0.05)	-0.05
Gender (0 = male)	-0.25*** (0.02)	-0.21	0.00 (0.03)	0.00	-0.06*** (0.01)	-0.10	-1.02*** (0.04)	-0.48	0.22*** (0.05)	0.11
Intercept	0.91***		0.50***		0.93***		1.55***		0.55**	
F value	51.80***		39.82***		23.15***		109.74***		19.62***	
R^2	0.17		0.14		0.09		0.31		0.07	
Adj. R^2	0.17		0.13		0.08		0.30		0.07	

*$p < .05$, ** $p < .01$, *** $p < .001$; *df1* = 12, *df2* = 2,000.

Sexual-self was measured using a series of statements about the importance of sex in respondents' lives, responses for which included 1 = *strongly disagree*, 2 = *disagree*, 3 = neither agree nor disagree, 4 = *agree*, 5 = *strongly agree*.

Responses for needs were coded as 1 = *not at all important*, 2 = *not important*, 3 = *neither important nor unimportant*, 4 = *important*, 5 = *very important*.

the behavior. The need to feel sexually desired played a role in predicting participation in Photo-TS and Porn-TS, though in each case the size of effect was quite small.

Gender was also a significant predictor for participation in Video-TS and the largest predictor for Real-World-Partner-TS and Porn-TS. Relationship status was also a factor in participation. Those respondents in relationships were more likely to participate in Photo-TS while sing respondents indicated more frequent participation in Real-World-Partner-TS and Porn-TS. Overall, coefficients of determination varied across the five models, ranging from a high of 0.30 for Porn-TS to a low of 0.07 for Sex-Info-TS.

Thus, based on these models, the following determinations are made about Hypotheses 6, 7, 8, 9, and 10. Hypothesis 6, which proposes a relationship between the need for sexual satisfaction and technosexuality, is rejected. Hypothesis 7, which proposes a relationship between nurturance and technosexuality, is also rejected. Hypothesis 8, which proposes a relationship between the need to discuss sexual experiences with friends (while controlling for group self-esteem) and technosexuality, is supported. Hypothesis 9, which proposes a relationship between sexual self-conceptualization and technosexuality, is supported as well. Finally, though there is some evidence to indicate support for Hypothesis 10, which proposes a relationships between the need to feel sexually desired and technosexuality, this hypothesis is ultimately rejected based on effect size and the fact that it was a significant predictor in only two models.

Sexual Identity and Technosexuality

H11: Male respondents will report the highest frequency of technosexuality.

Table 34 indicates that participation in technosexuality by gender varied by the type of behavior. Overall, gender was a significant factor in Real-World-Partner-TS, Video-TS, Porn-TS, and Sex-Info-TS, though not for Photo-TS. Men reported the highest means for Real-World-Partner-TS and Porn-TS. Male and transgender respondents reported highest means for Video-TS, and female respondents reported the highest mean for Sex-Info-TS. Due to unequal numbers per group and unequal variance, Dunnett's T3 post-hoc tests were used to investigate between group differences. Dunnett's T3 is a conservative post-hoc analysis for groups containing unequal observations and unequal variance; however, on account of this, it is important to call attention to the possibility for Type II error in these data.

There were significant differences between men and women for all four technosexual measures for which gender was a significant factor. In the case of the arousal-oriented technosexual behaviors (Real-World-Partner-TS, Video-TS, and Porn-TS), males reported higher means than female respondents, indicating that they participate in these behaviors at a greater frequency. However, in the case of Sex-Info-TS females indicated a higher frequency of participation. Transgender and female respondents also differed significantly in the case of Porn-TS, with transgender respondents reporting a higher mean. Overall, therefore, hypothesis 11 is supported.

> H12: Controlling for gender identity, gay respondents will report a higher frequency of participation in technosexual behaviors than lesbian, bisexual, straight, or queer respondents.

Table 35 displays the results of a one-way analysis of variance and post-hoc tests for technosexual behaviors by sexual identity and gender. Dunnett's T3 tests were once again used for post-hoc analysis on account of unequal group numbers and variance.

Table 34 One-way analyses of variance and Dunnett's T3 post-hoc tests for incidence of technosexuality by gender identity

	Gender Identity							
Variables	*Female mean (SD)*	*Male mean (SD)*	*Transgender mean (SD)*	*F*	*df1*	*df2*	η^2	*Significance*
RWP-TS	1.22[c] (0.37)	1.50[c] (0.74)	1.47 (0.74)	62.61	12	2,000	0.06	$p < .001$
Photo-TS	1.59 (0.69)	1.62 (0.75)	1.63 (0.76)	0.43	12	2,000	0.00	*ns*
Video-TS	1.10[c] (0.26)	1.17[c] (0.36)	1.17 (0.57)	13.98	12	2,000	0.01	$p < .001$
Porn-TS	1.64[c, c'] (0.78)	2.70[c] (1.00)	2.35[c'] (1.00)	344.52	12	2,000	0.26	$p < .001$
SexInfo-TS	1.91[c] (1.06)	1.68[c] (0.89)	1.65 (1.02)	11.57	12	2,000	0.01	$p < .001$

[a] $p < .05$, [b] $p < .01$, [c] $p < .001$.

Note: The same subscript in the same row denotes a pairwise comparison of differences. For instance, the fourth row (porn-TS) in this table has three statistically significant comparisons of differences. One (c) is between female and male respondents and is significant at $p < .001$; another (a) is between male and transgender responents and is significant at $p < .05$; a third (c') is between female and transgender respondents and is significant at $p < .001$.

Table 35 One-way analyses of variance and Dunnett's T3 post-hoc tests for technosexuality by sexual identity and gender

	Technosexual Behaviors				
Sexual ID	*RWP-TS mean (SD)*	*Photo-TS mean (SD)*	*Video-TS mean (SD)*	*Porn-TS mean (SD)*	*SexInfo-TS mean (SD)*
Bisexual					
Female	1.23 (0.37)	1.69 (0.80)	1.14 (0.33)	2.11 (0.89)	2.08 (1.11)
Male	1.85 (1.00)	1.72 (0.88)	1.33 (0.73)	3.13 (1.17)	1.93 (1.04)
Transgender	1.97 (0.96)	1.31 (0.35)	1.09 (0.12)	1.50 (0.71)	1.80 (1.10)
Gay					
Male	2.05 (1.04)	1.91 (0.91)	1.29 (0.43)	3.19 (0.88)	1.80 (0.93)
Transgender	1.23 (0.30)	2.04 (0.83)	1.24 (0.33)	3.00 (1.37)	1.20 (0.45)
Lesbian					
Female	1.30 (0.44)	1.69 (0.71)	1.11 (0.26)	1.91 (0.80)	1.68 (1.00)
Transgender	1.10 (0.15)	1.91 (0.65)	1.05 (0.09)	2.60 (0.74)	1.60 (0.89)
Straight					
Female	1.20 (0.34)	1.56 (0.67)	1.09 (0.25)	1.52 (0.73)	1.90 (1.05)
Male	1.29 (0.45)	1.51 (0.65)	1.12 (0.27)	2.52 (0.96)	1.63 (0.86)
Transgender	1.67 (1.22)	1.64 (1.32)	1.76 (1.59)	2.00 (1.46)	2.00 (1.73)
Queer					
Female	1.53 (0.56)	1.79 (0.67)	1.15 (0.33)	2.21 (0.67)	2.19 (1.20)
Male	2.15 (1.01)	2.02 (1.00)	1.34 (0.70)	3.00 (1.08)	2.10 (1.10)
Transgender	1.45 (0.69)	1.55 (0.69)	1.07 (0.21)	2.41 (0.83)	1.65 (0.98)
F	40.46	4.78	8.67	78.22	3.75
Significance	$p < .001$	$p < .001$	$p < .001$	$p < .001$	$p < .001$
η^2	0.20	0.03	0.05	0.32	0.02

N = 2013, *df* 1=12, *df1* = 12, *df2* = 2,000.

Thus, Type II error is also once again a consideration in interpreting these findings. *F*-tests revealed significance differences for all technosexual behaviors by sexual identity and gender, though effect sizes varied considerably by factor. In the case of Photo-TS, gay male respondents reported higher means than straight female and male respondents. Queer male respondents reported the highest mean overall, though, on account of the relatively low group number ($N = 10$) and high standard deviation ($SD = 1.00$), they displayed no significant between group differences. The effect size of sexual identity by gender on Photo-TS was small ($\eta^2 = 0.03$). Significant between-group differences are detailed in Table 37.

Regarding Real-World-Partner-TS, gay male respondents reported one of the highest group averages and had the most between group differences. In brief, gay males indicated a higher frequency of participation in Real-World-Partner-TS than bisexual, lesbian, straight, and queer female respondents, straight male respondents, and transgender lesbian respondents. In addition to gay male respondents, straight female respondents also reported a lower average frequency of participation than straight male and queer female respondents. Once again, queer male respondents reported the highest mean overall, though there were no observable significant between group differences. The effect size of sexual identity by gender on Real-World-Partner-TS was high ($\eta^2 = 0.20$). Significant between-group differences are detailed in Table 36.

Gay male respondents exhibited the only between group differences for Video-TS, though, notably, several other groups (bisexual and queer males as well as gay and

straight transgender males) reported higher mean levels of participation. Gay males indicated participating in Video-TS more than lesbian female and transgender, straight

Table 36 Dunnett's T3 significant post-hoc tests for Real-World-Partner-TS by sexual identity and gender

Sexual Identity	*Significant Group Difference*	*Mean Difference*	*Significance*
Gay male	Bisexual female	0.81	$p < .001$
	Gay trans	0.78	$p < .05$
	Lesbian female	0.75	$p < .001$
	Lesbian trans	0.95	$p < .001$
	Straight female	0.85	$p < .001$
	Straight male	0.75	$p < .001$
	Queer female	0.52	$p < .01$
Straight male	Straight female	0.09	$p < .01$
Queer female	Lesbian trans	0.43	$p < .05$
	Straight female	0.33	$p < .05$

Table 37 Dunnett's T3 significant post-hoc tests for Photo-TS by sexual identity and gender

Sexual Identity	*Significant Group Difference*	*Mean Difference*	*Significance*
Gay male	Straight female	0.35	$p < .001$
	Straight male	0.40	$p < .001$

Table 38 Dunnett's T3 significant post-hoc tests for Video-TS by sexual identity and gender

Sexual Identity	*Significant Group Difference*	*Mean Difference*	*Significance*
Gay male	Lesbian female	0.18	$p < .01$
	Lesbian trans	0.24	$p < .05$
	Straight female	0.20	$p < .001$
	Straight male	0.17	$p < .01$
	Queer trans	0.21	$p < .05$

female and male, and queer transgender respondents. Overall, the effect size of sexual identity by gender on Video-TS was small ($\eta^2 = 0.05$). Significant between-group differences are detailed in Table 38.

Porn-TS presented numerous between group differences, most notably for gay male and straight female respondents. In this case, gay males reported the highest average participation, while straight females indicated one of the lowest frequencies of participation. Bisexual female respondents reported a lower average participation than bisexual, gay, and straight male respondents, and a higher average than straight female respondents. In addition to bisexual female respondents, bisexual males also reported a higher average participation in Porn-TS than lesbian, straight, and queer female respondents. Gay male respondents reported a higher average participation than bisexual, lesbian, and straight female respondents, queer female and transgender respondents, as well as straight male respondents. Aside from those already mentioned, lesbian female respondents reported average participations lower than straight males and higher than straight females. Straight females, in addition to the previous groups already mentioned, also indicated lower average levels of participation than straight male as well as queer female and transgender participants. The effect size of sexual identity by gender on Porn-TS was large ($\eta^2 = 0.32$). Significant between-group differences are detailed in Table 39.

Gay and transgender respondents reported the lowest mean for frequency of participation in Sex-Info-TS. In general, female respondents reported higher mean frequencies of participation than male respondents, with bisexual and straight female respondents indicated significantly higher averages than straight male respondents.

Table 39 Dunnett's T3 significant post-hoc tests for Porn-TS by sexual identity and gender

Sexual Identity	*Significant Group Difference*	*Mean Difference*	*Significance*
Bisexual female	Straight female	0.59	$p < .001$
Bisexual male	Bisexual female	1.02	$p < .05$
	Lesbian female	1.22	$p < .01$
	Straight female	1.61	$p < .001$
	Queer female	0.92	$p < .05$
Gay male	Bisexual female	1.08	$p < .001$
	Lesbian female	1.28	$p < .001$
	Straight female	1.67	$p < .001$
	Straight male	0.68	$p < .001$
	Queer female	0.98	$p < .001$
	Queer trans	0.78	$p < .05$
Lesbian female	Straight female	0.39	$p < .001$
Straight male	Bisexual female	0.41	$p < .01$
	Lesbian female	0.61	$p < .001$
	Straight female	0.99	$p < .001$
Queer female	Straight female	0.69	$p < .001$
Queer trans	Straight female	0.89	$p < .01$

Table 40 Dunnett's T3 significant post-hoc tests for Sex-Info-TS by sexual identity and gender

Sexual Identity	*Significant Group Difference*	*Mean Difference*	*Significance*
Bisexual female	Straight male	0.46	$p < .01$
Straight female	Straight male	0.27	$p < .001$

Overall, the low effect size for sexual identity by gender on Sex-Info-TS was low (η^2 = 0.02). Significant between-group differences are detailed in Table 40.

While the mean for gay male technosexual participation was not always the highest, these data indicate that it was consistently higher than that other sexual identities'. Thus, with the exclusion of Sex-Info-TS, these findings indicate overall support for Hypothesis 12.

Social Media Use and Technosexuality

> RQ9: What is the relationship between participation in non-sexual, technologically mediated queer behaviors and participation in technosexual behaviors?

Virtual queer participation in non-sexual behaviors was measured by asking respondents about sexual identity related components of their social media use. Tables 41, 42, 43, and 44 display the results of cross-tabulations between several sexual identity related social media measures by sexual identity. Respondents who reported not having a Facebook profile or Twitter account were excluded from the according analysis. These data reveal that straight respondents are the most likely to disclose a sexual identity in their Facebook profiles. Less than half of gay, lesbian, and queer respondents indicated disclosing sexual identity in their Facebook profiles. Bisexual respondents reported the lowest level of Facebook profile sexual identity disclosure at just under 20%. Similarly, roughly 75% of queer, gay, and lesbian respondents reported that they use Facebook to post about topics related to their sexual identity compared to less than half of bisexual respondents.

Table 41 Cross-tabulation of disclosure of sexual identity in Facebook profile by sexual identity

	Sexual Identity				
Social Media Measure	*Bisexual*	*Gay*	*Lesbian*	*Straight*	*Queer*
Disclose sexual ID in Facebook profile					
Yes	17.2%	44.3%	40.6%	68.6%	38.2%
No	82.8	55.7	59.4	31.4	61.8
	100.0%	100.0%	100.0%	100.0%	100.0%
	(N = 145)	(N = 158)	(N = 106)	(N = 1431)	(N = 76)

$\chi^2 = 202.75$, $df = 4$, $p < .001$, Cramer's $V = 0.33$

Table 42 Cross tabulation of disclosure of sexual identity in Twitter profile by sexual identity

	Sexual Identity				
Social Media Measure	*Bisexual*	*Gay*	*Lesbian*	*Straight*	*Queer*
Disclose sexual ID in Twitter bio					
Yes	1.4%	15.2%	24.3%	24.3%	22.2%
No	98.6	84.8	75.7	75.7	77.8
	100.0%	100.0%	100.0%	100.0%	100.0%
	(N = 70)	(N = 79)	(N = 37)	(N = 688)	(N = 36)

$\chi^2 = 40.21$, $df = 4$, $p < .001$, Cramer's $V = 0.29$

Table 43 Cross tabulation of the use of Facebook to post about topics related to sexual identity by sexual identity

	Sexual Identity				
Social Media Measure	*Bisexual*	*Gay*	*Lesbian*	*Straight*	*Queer*
Use Facebook to post about topics related to sexual ID[2]					
Yes	45.5%	75.3%	68.9%	-	76.3%
No	54.5	24.7	31.1	-	23.7
	100.0%	100.0%	100.0%	-	100.0%
	(N = 145)	(N = 158)	(N = 106)		(N = 76)

χ^2 = 21.77, df = 4, p < .001, Cramer's V = 0.16

Table 44 Cross tabulation of the use of Twitter to post about topics related to sexual identity by sexual identity

	Sexual Identity				
Social Media Measure	*Bisexual*	*Gay*	*Lesbian*	*Straight*	*Queer*
Use Twitter to post about topics related to sexual ID					
Yes	34.2%	55.4%	60.5%	-	62.2%
No	65.8	44.6	39.5	-	37.8
	100.0%	100.0%	100.0%	-	100.0%
	(N = 73)	(N = 83)	(N = 38)		(N = 37)

χ^2 = 12.06, df = 3, p < .01, Cramer's V = 0.23

For respondents with Twitter accounts, roughly 25% of lesbian, straight, and queer respondents reported disclosing their sexual identity in their Twitter bios. A mere 15% of gay respondents and less than 2% of bisexual respondents indicated sexual identity disclosure in their account bios. Likewise, bisexual respondents reported being far less likely to use Twitter to post about topics related to their sexual identities than gay, lesbian, and queer respondents, of whom around 60% indicated using the microblogging site to do so.

Tables 45, 46, 47, and 48 display one-way analyses of variance between social media measures and technosexuality. As indicated by these results, there was generally little, if any, difference in technosexuality between those respondents who participated in sexual identity-related social media measures and those who did not. There are, of course, a few exceptions to this conclusion. One such exception is the relationship between Twitter bio sexuality disclosure and Video-TS. In this case, respondents who indicating sexual identity disclosure on Twitter also reported a higher average Video-TS participation than those who did not. Other exceptions included the use of Facebook to post about topics related to sexual identity and participation in Photo-TS and Real-World-Partner-TS. In both of these cases respondents who indicated using Facebook to post about topics related to their sexual identities also reported higher averages of participation in the technosexual behaviors. Otherwise, there was no significant difference in technosexuality between groups. Based on these measures, it does not seem that indications of participation in sexual identity-related, virtual, non-sexual behaviors is any indication of technosexual participation.

Table 45 One-way analyses of variance for disclosure of sexual identity in Facebook profile and technosexuality

	Disclose sexual ID in Facebook profile					
	Yes mean (SD)	*No mean (SD)*	*F*	*df1*	*df2*	*Significance*
RWP-TS	1.31 (0.50)	1.36 (0.62)	3.67	1	1,914	*ns*
Photo-TS	1.61 (0.70)	1.62 (0.74)	0.08	1	1,914	*ns*
Video-TS	1.13 (0.31)	1.14 (0.32)	0.48	1	1,914	*ns*
Porn-TS	2.00 (1.01)	2.06 (0.99)	1.25	1	1,914	*ns*
SexInfo-TS	1.83 (1.01)	1.83 (1.02)	0.00	1	1,914	*ns*

Table 46 One-way analysis of variance for the use of Facebook to post about topics related to sexual identity and technosexuality

	Use Facebook to post about topics related to sexual ID					
	Yes mean (SD)	*No mean (SD)*	*F*	*df1*	*df2*	*Significance*
RWP-TS	1.67 (0.85)	1.46 (0.69)	7.47	1	485	$p < .01$
Photo-TS	1.88 (0.87)	1.62 (0.71)	11.78	1	485	$p < .01$
Video-TS	1.22 (0.41)	1.16 (0.34)	2.87	1	485	*ns*
Porn-TS	2.58 (1.03)	2.39 (1.00)	3.73	1	485	*ns*
SexInfo-TS	1.85 (1.00)	1.91 (1.04)	0.35	1	485	*ns*

Table 47 One-way analysis of variance for disclosure of sexual identity in Twitter profile and technosexuality

	Disclose sexual ID in Twitter profile					
	Yes mean (SD)	*No mean (SD)*	*F*	*df1*	*df2*	*Significance*
RWP-TS	1.45 (0.63)	1.34 (0.57)	5.58	1	908	$p < .05$
Photo-TS	1.76 (0.82)	1.62 (0.71)	5.45	1	908	$p < .05$
Video-TS	1.19 (0.44)	1.12 (0.28)	6.94	1	908	$p < .01$
Porn-TS	2.09 (1.08)	2.07 (1.01)	0.06	1	908	*ns*
SexInfo-TS	1.92 (1.12)	1.89 (1.00)	0.15	1	908	*ns*

Table 48 One-way analysis of variance for the use of Twitter to post about topics related to sexual identity and technosexuality

	Use Twitter to post about topics related to sexual ID					
	Yes mean (SD)	*No mean (SD)*	*F*	*df1*	*df2*	*Significance*
RWP-TS	1.68 (0.82)	1.63 (0.85)	0.27	1	229	*ns*
Photo-TS	1.87 (0.81)	1.79 (0.81)	0.67	1	229	*ns*
Video-TS	1.26 (0.51)	1.18 (0.33)	1.63	1	229	*ns*
Porn-TS	2.71 (1.02)	2.59 (1.05)	0.86	1	229	*ns*
SexInfo-TS	1.95 (1.01)	1.98 (1.12)	0.06	1	229	*ns*

Full Regression Models

In order to test the collective effect of attitudes, motivations, and identity on technosexuality, statistically significant measures from previous models were aggregated into full regression models for each technosexual factor. Variables were entered block wise by type to measure the change in the coefficient of determination from one model to the next. Each model is composed of four different variable blocks: technology measures; gender, sexual identity, and sexual history measures; sexual attitude measures; and finally needs and motivations. Suggested models are those that resulted in a significant change in the coefficient of determination. Following the explanation of the models, consideration is given to a proposed structural model for partnered-arousal technosexual behaviors (Photo-TS, Real-World-Partner-TS, and Video-TS).

Table 49 displays the full model for Photo-TS regressed on the four blocks of group variables and control measures. For the overall model, the amount of text messages sent and received is the largest predictor ($\beta = 0.30$). This is a sensible finding given that the majority of behaviors that form the factor Photo-TS are mobile phone and texting related behaviors. The sexual self-conceptualization of respondents was also a significant factor in predicting Photo-TS. Namely, as sexual self-conceptualization increased, so, too, did participation in Photo-TS ($\beta = 0.15$). Age ($\beta = -0.14$) and gender ($\beta = 0.14$) were equally significant predictors, with younger and female respondents more likely than older and male ones to indicate participation. The amount of lifetime sex partners also predicted Photo-TS participation, with participation increasing as the number of sex partners did, even when controlling for age ($\beta = 0.13$).

Table 49 Photo-TS full regression model, N = 2,013

	Model 1			*Model 2*			*Model 3*			*Model 4*		
	b	*S.E.*	*β*	*b*	*S.E.*	*β*	*B*	*S.E.*	*β*	*b*	*S.E.*	*β*
Age	0.00	0.00	0.00	-0.01***	0.00	-0.10	-0.01***	0.00	-0.12	-0.01***	0.00	-0.14
Text messages sent/received	0.17***	0.01	0.34	0.15***	0.01	0.31	0.16***	0.01	0.32	0.15***	0.01	0.30
Laptop use	0.01	0.02	0.01	0.03	0.02	0.04	0.03	0.02	0.04	0.04	0.02	0.04
Desktop use	0.01	0.02	0.02	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.02
Mobile phone use	-0.01	0.04	-0.01	-0.02	0.02	-0.04	-0.02	0.02	-0.01	-0.01	0.03	-0.01
Smartphone use	0.03	0.03	0.05	0.03	0.02	0.03	0.02	0.02	0.02	0.01	0.03	0.02
Internet use	0.01*	0.00	0.04	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.01
Technology optimism	0.04	0.02	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.02	0.01
Gender (0 = male)				0.24***	0.04	0.16	0.22***	0.04	0.15	0.20***	0.04	0.14
Sexual identity (0 = gay)				-0.09	0.06	-0.04	-0.03	0.06	-0.01	-0.10	0.06	-0.04
Queer factor				-0.18***	0.03	-0.11	-0.18***	0.03	-0.11	-0.12***	0.03	-0.08
Sociosexual orientation				0.05***	0.01	0.12	0.03*	0.01	0.08	0.03*	0.01	0.07
Number sex partners last year				0.01**	0.00	0.06	0.01*	0.00	0.05	0.01*	0.00	0.04
Number one-time sex partners				-0.01*	0.00	-0.08	-0.00	0.00	-0.04	-0.00	0.00	-0.02
Number lifetime sex partners				0.01***	0.00	0.23	0.01***	0.00	0.16	0.01**	0.00	0.13
Masturbation frequency				0.03**	0.01	0.01	0.02**	0.01	0.08	0.02	0.01	0.05
Porn exposure frequency				0.05***	0.01	0.15	0.04***	0.01	0.12	0.04***	0.01	0.12
Anal sex appeal							0.11***	0.02	0.13	0.07***	0.02	0.09
Group sex appeal							0.03	0.02	0.05	0.02	0.02	0.02
Anonymous sex appeal							-0.02	0.02	-0.02	-0.02	0.02	-0.03
Monogamy appeal							0.02	0.03	0.01	0.01	0.03	0.01
Consensual non-monogamy Appeal							0.00	0.02	0.00	0.00	0.02	0.00
Infidelity (0 = no infidelity)							-0.19***	0.03	-0.12	-0.15***	0.03	-0.10
Discuss										0.04*	0.02	0.05
Desired										-0.03	0.02	-0.03
Sexual Self										0.14***	0.02	0.15
Relationship status (0 = single)										0.15***	0.03	0.11
Intercept	0.70***	0.17		0.58**	0.17		0.77***	0.22		0.53*	0.22	
F value	38.08***			45.08***			37.68***			37.51***		
Total R^2	0.13			0.28			0.30			0.34		
Adj. R^2	0.13			0.27			0.30			0.33		
R^2 change				0.14***			0.03***			0.03***		

*p< .05, **p< .01, ***p< .001; *df1* = 12, *df2* = 2,000.

Relationship status also affected participation such that single respondents were less likely to indicate participation than non-single respondents (β = 0.11). Similarly, those respondents reporting an instance of infidelity in a past relationship were less likely than those respondents who reported no such incident to indicate Photo-TS participation (β = -0.10). Frequency of pornography exposure (β = 0.12) and the appeal of deviant sexual behaviors (β = 0.09) were both positively correlated with participation, as were sociosexual orientation (β = 0.07) and the need to discuss sexual experiences with friends (β = 0.05). Finally, queer factor, or the degree of incongruity in respondent's sexual identities, was also a significant predictor or behavior, with a greater incongruity corresponding to a decreased likelihood to participate in the behaviors (β = -0.08). Overall, the full regression model accounts for roughly 33% of sample variance.

Table 50 displays the full regression model for Real-World-Partner-TS. For this model, sexual identity was the largest predictor of participation (β = -0.20), with gay respondents indicating a significantly higher degree of participation than non-gay respondents. Relatedly, relationship status was also a significant predictor of behavior such that single respondents were more likely to report participation than non-single respondents (β = -0.13). Respondents' number of lifetime sex partners (β = 0.12) as well as respondents' number of sex partners during the last year (β = 0.11) were both positively correlated with Real-World-Partner-TS participation, as was respondents' frequency of pornography exposure (β = 0.09). Other significant predictors included respondents' sexual self-conceptualizations (β = 0.10) and the need to discuss their sexual experiences with friends (β = 0.07). Finally, the appeal of deviant behaviors was positively correlated with participation (β = 0.08) while the appeal of monogamy was

Table 50 Real-World-Partner-TS full regression model, N = 2,013

	Model 1			*Model 2*			*Model 3*			*Model 4*		
	b	*S.E.*	*β*	*b*	*S.E.*	*β*	*b*	*S.E.*	*β*	*b*	*S.E.*	*β*
Age	0.00**	0.00	0.06	-0.01**	0.00	-0.07	-0.01***	0.00	-0.08	-0.00	0.00	-0.02
Laptop use	0.00	0.02	0.00	0.02	0.02	0.03	0.02	0.02	0.03	0.02	0.02	0.02
Desktop use	0.01	0.01	0.03	0.01	0.01	0.03	0.01	0.01	0.03	0.01	0.01	0.02
Smartphone use	0.04***	0.01	0.09	0.02*	0.01	0.04	0.02*	0.02	0.04	0.01	0.01	0.04
Tablet use	0.03	0.02	0.04	0.02	0.01	0.02	0.02	0.01	0.02	0.02	0.01	0.02
Internet use	0.01**	0.00	0.05	0.00	0.00	0.02	0.00	0.00	0.02	0.00	0.00	0.02
Technology optimism	0.04*	0.02	0.05	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.02	0.01
Gender (0 = male)				0.01	0.03	0.01	0.03	0.03	0.02	0.00	0.03	0.00
Sexual identity (0 = gay)				-0.48***	0.04	-0.22	-0.42***	0.05	-0.21	-0.41***	0.05	-0.20
Queer factor				0.01	0.03	0.00	0.01	0.02	0.00	0.00	0.03	0.00
Sociosexual orientation				0.06***	0.01	0.18	0.04***	0.01	0.11	0.02	0.01	0.05
Number sex partners last year				0.02***	0.00	0.14	0.02***	0.00	0.13	0.02***	0.00	0.11
Number one-time sex partners				0.00	0.00	0.02	0.00	0.00	0.03	0.00	0.00	0.03
Number lifetime sex partners				0.01***	0.00	0.16	0.01***	0.00	0.14	0.00**	0.00	0.12
Masturbation frequency				-0.00	0.01	-0.01	-0.00	0.01	-0.01	-0.01	0.01	-0.03
Porn exposure frequency				0.03**	0.01	0.11	0.02**	0.01	0.09	0.02**	0.01	0.09
Anal sex appeal							0.06***	0.02	0.09	0.05**	0.02	0.08
Anonymous sex appeal							0.05**	0.02	0.09	0.04**	0.02	0.07
Monogamy appeal							-0.04*	0.02	-0.04	-0.05*	0.02	-0.05
Consensual non-monogamy appeal							-0.01	0.01	-0.01	-0.01	0.01	-0.01
Infidelity (0 = no infidelity)							-0.02	0.02	-0.01	-0.03	0.02	-0.03
Discuss										0.04**	0.01	0.07
Sexual satisfaction										0.01	0.02	0.01
Sexual self										0.07***	0.02	0.10
Relationship Status (0 = single)										-0.14***	0.02	-0.13
Intercept	0.80***	0.12		1.08***	0.13		1.21***	0.17		1.14***	0.17	
F value	8.38***			51.71***			41.53***			39.48***		
R^2	0.03			0.29			0.31			0.33		
Adj. R^2	0.03			0.29			0.30			0.32		
R^2 change				0.26***			0.01***			0.02***		

*p< .05, **p< .01, ***p<. 001; *df1* = 12, *df2* = 2,000.

negatively correlated (β = -0.05) with the frequency of Real-World-Partner-TS. Overall, the full model accounted for about 33% of the variance in the sample.

Table 51 shows four regression models for Video-TS participation. The overall model, while significant, explains a relatively small percentage of sample variance (just over 15%) when compared to the other factors' coefficients of determination. The appeal of deviant sexual acts was largest predictor of Video-TS participation (β = 0.12), followed by age, such that participation decreased as respondents' ages increased (β = -0.11). Respondents' number of lifetime sex partners was also a significant predictor, with participation increasing as the number of partners increased (β = 0.08). The amount of text messages sent and received was also positively correlated with Video-TS (β = 0.12). Fidelity was also a significant predictor of behavior such that those respondents reporting past acts of infidelity were less likely to indicate Video-TS participation (β = -0.08). Finally, the appeal of monogamy was negatively correlated with this aspect of technosexuality (β = -0.07).

Table 52 displays the results for the full regression model for Porn-TS. This model differs from the prior ones in that it switches from partnered-arousal to solitary-arousal behaviors. Unsurprisingly, frequency of pornography exposure was the largest predictor of Porn-TS (β = 0.72), suggesting a convergence between pornography consumption habits and technology. Other measures, relatively weak by comparison, included mobile phone usage (β = -0.13), smartphone usage (β = 0.11), the appeal of deviant sexual acts (appeal of anal sex: β = 0.06; appeal of group sex: β = 0.05; appeal of anonymous sex: β = 0.03), and sociosexual orientation (β = 0.05), which were all positively correlated with Porn-TS participation. Sexual identity was also a significant

Table 51 Video-TS full regression model, $N = 2{,}013$

	Model 1			*Model 2*			*Model 3*			*Model 4*		
	b	*S.E.*	*β*	*b*	*S.E.*	*β*	*b*	*S.E.*	*β*	*b*	*S.E.*	*B*
Age	0.00	0.00	0.00	-0.00**	0.00	-0.09	-0.00***	0.00	-0.10	-0.00***	0.00	-0.11
Text messages sent/received	0.03***	0.01	0.13	0.03***	0.01	0.12	0.03***	0.01	0.13	0.03***	0.01	0.12
Laptop use	0.00	0.01	0.00	0.01	0.01	0.02	0.01	0.01	0.02	0.01	0.01	0.03
Desktop use	0.00	0.01	0.02	0.00	0.01	0.03	0.00	0.01	0.01	0.00	0.01	0.01
Mobile phone use	-0.03	0.02	-0.11	-0.03*	0.01	-0.14	-0.03*	0.02	-0.13	-0.03	0.02	-0.11
Smartphone use	0.02	0.02	0.10	0.02	0.01	0.10	0.02	0.01	0.09	0.02	0.01	0.08
Tablet use	0.01	0.01	0.04	0.01	0.01	0.03	0.01	0.01	0.02	0.01	0.01	0.02
Internet use	0.00	0.00	0.01	-0.00	0.00	-0.02	-0.00	0.00	-0.02	-0.00	0.00	-0.02
Technology optimism	0.01	0.01	0.03	0.00	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.00
Gender (0 = male)				0.01	0.02	0.02	0.00	0.02	0.00	-0.01	0.02	-0.01
Sexual identity (0 = gay)				-0.08**	0.03	-0.04	-0.04	0.03	-0.03	-0.06	0.03	-0.05
Queer factor				-0.02	0.02	-0.03	-0.02	0.02	-0.02	0.00	0.02	0.00
Sociosexual orientation				0.01**	0.00	0.07	-0.01	0.01	-0.05	-0.01*	0.01	-0.07
Number sex partners last year				0.00	0.00	0.04	0.00	0.00	0.02	0.00	0.00	0.02
Number one-time sex partners				-0.00	0.00	-0.05	-0.00	0.00	-0.02	-0.00	0.00	-0.00
Number lifetime sex partners				0.00***	0.00	0.18	0.00**	0.00	0.10	0.00**	0.00	0.08
Masturbation frequency				0.01	0.00	0.04	0.00	0.00	0.03	0.00	0.00	0.01
Porn exposure frequency				0.01	0.01	0.09	0.01	0.01	0.05	0.01	0.00	0.06
Anal sex appeal							0.06***	0.01	0.15	0.04***	0.01	0.12
Anonymous sex appeal							0.02	0.01	0.05	0.01	0.01	0.03
Monogamy appeal							-0.04**	0.01	-0.07	-0.04**	0.01	-0.07
Consensual non-monogamy appeal							0.02*	0.01	0.07	0.02*	0.02	0.07
Infidelity (0 = no infidelity)							-0.07***	0.02	-0.10	-0.06***	0.02	-0.08
Discuss										0.02**	0.01	0.07
Sexual Self										0.05***	0.01	0.12
Relationship status (0=single)										0.04**	0.01	0.07
Intercept	0.95***	0.07		0.99***	0.09		1.12***	0.11		1.09***	0.11	
F value	5.15***			12.33***			13.70***			14.55***		
Total R^2	0.02			0.10			0.14			0.16		
Adj. R^2	0.02			0.09			0.13			0.15		
R^2 change				0.08***			0.04***			0.02***		

*p<.05, **p<.01, ***p<.001; *df1* = 12, *df2* = 2,000.

Table 52 Porn-TS full regression model, N = 2,013

	Model 1			*Model 2*			*Model 3*			*Model 4*		
	b	*S.E.*	*β*	*b*	*S.E.*	*β*	*b*	*S.E.*	*β*	*b*	*S.E.*	*β*
Age	-0.00	0.00	-0.03	-0.01*	0.00	-0.04	-0.01**	0.00	-0.05	-0.01**	0.00	-0.05
Laptop use	-0.09**	0.03	-0.07	-0.02	0.02	-0.02	-0.03	0.02	-0.02	-0.02	0.02	-0.02
Desktop use	0.04	0.02	0.05	-0.00	0.01	-0.00	-0.01	0.01	-0.01	-0.01	0.01	-0.01
Mobile phone use	0.02	0.03	0.05	-0.11***	0.03	-0.14	-0.11***	0.03	-0.14	-0.10**	0.03	-0.13
Smartphone use	-0.00	0.03	-0.03	0.08**	0.03	0.12	0.08**	0.03	0.11	0.08**	0.03	0.11
Tablet use	0.06	0.03	0.04	0.03	0.02	0.02	0.03	0.02	0.02	0.03	0.02	0.02
Internet use	0.02***	0.00	0.09	0.00	0.00	0.02	0.00*	0.00	0.03	0.00	0.00	0.03
Technology optimism	0.11**	0.03	0.07	0.02	0.02	0.02	0.02	0.02	0.01	0.02	0.02	0.01
Gender (0 = male)				-0.06	0.04	-0.03	0.01	0.04	0.01	0.00	0.04	0.00
Sexual identity (0 = gay)				-0.20***	0.05	-0.06	-0.17**	0.06	-0.05	-0.17**	0.06	-0.05
Queer factor				-0.01	0.03	-0.01	-0.01	0.03	-0.00	0.00	0.03	0.00
Sociosexual orientation				0.06***	0.01	0.10	0.03*	0.01	0.05	0.03*	0.01	0.05
Number one-time sex partners				-0.01**	0.00	-0.07	-0.01*	0.00	-0.06	-0.01*	0.00	-0.05
Number lifetime sex partners				0.01**	0.00	0.07	0.00	0.00	0.04	0.00	0.00	0.04
Masturbation frequency				-0.00	0.01	-0.01	-0.01	0.01	-0.01	-0.01	0.01	-0.02
Porn exposure frequency				0.35***	0.01	0.74	0.33***	0.01	0.72	0.33***	0.01	0.72
Anal sex appeal							0.08***	0.02	0.07	0.07***	0.02	0.06
Group sex appeal							0.05**	0.02	0.06	0.05**	0.02	0.05
Anonymous sex appeal							0.04*	0.02	0.04	0.04*	0.02	0.03
Consensual non-monogamy appeal							-0.01	0.02	-0.01	-0.01	0.02	-0.01
Infidelity (0 = no fidelity)							-0.05	0.03	-0.02	-0.04	0.03	-0.02
Discuss										0.03*	0.02	0.03
Sexual Self										0.01	0.02	0.01
Relationship status (0 = single)										0.03	0.03	0.02
Intercept	1.70***	0.22		0.90***	0.16		0.88**	0.17		0.79*	0.17	
F value	7.33***			263.53***			206.84***			181.61***		
R^2	0.03			0.68			0.69			0.69		
Adj. R^2	0.03			0.68			0.68			0.68		
R^2 change				0.65***			0.00			0.00		

*p<.05, **p<.01, ***p<.001; *df1* = 12, *df2* = 2,000.

predictor of frequency of participation in Porn-TS, with gay respondents indicating a higher frequency of participation than straight respondents (β = -0.05). Finally, age was negatively correlated with Porn-TS (β = -0.05). Overall, the full regression model accounted for about 68% of sample variance.

Finally, Sex-Info-TS was regressed on motivations, attitudes, and identity in Table 53. In the case of the full model for Sex-Info-TS, very few measures proved to be significant predictors of frequency of participation. Gender was a significant predictor (β = 0.18), with female and transgender respondents indicated a greater likelihood to participate in Sex-Info-TS than male respondents. The need to discuss sexual experiences with friends was positively correlated with participation (β = 0.15) as was the appeal of deviant behaviors (β = 0.07). As responents' sociosexual orientation increased, so, too, did participation in Sex-Info-TS (β = 0.10). Lastly, age was negatively correlated with behavior (β = -0.09), suggesting that younger respondents were more likely to report a higher frequency of participation than older ones. Overall, the full model accounts for a 9% of sample variance.

Table 53 Sex-Info-TS full regression model, N = 2,013

	Model 1			*Model 2*			*Model 3*			*Model 4*		
	b	*S.E.*	*β*	*b*	*S.E.*	*β*	*b*	*S.E.*	*β*	*b*	*S.E.*	*β*
Age	-0.02***	0.00	-0.12	-0.01***	0.00	-0.11	-0.02***	0.00	-0.13	-0.01**	0.00	-0.09
Laptop use	0.01	0.03	0.00	-0.01	0.03	-0.01	-0.01	0.03	-0.01	-0.01	0.03	-0.01
Desktop use	-0.02	0.02	-0.02	-0.02	0.02	-0.02	-0.02	0.02	-0.02	-0.02	0.02	-0.02
Mobile phone use	-0.10	0.05	-0.12	-0.10	0.05	-0.12	-0.10	0.05	-0.12	-0.09	0.05	-0.11
Smartphone use	0.06	0.05	0.09	0.06	0.05	0.08	0.05	0.05	0.08	0.04	0.05	0.06
Tablet use	0.06*	0.03	0.05	0.07*	0.03	0.05	0.07	0.03	0.05	0.07*	0.03	0.05
Internet use	-0.00	0.00	-0.01	-0.00	0.00	-0.02	-0.00	0.00	-0.02	-0.01	0.00	-0.03
Technology optimism	0.04	0.04	0.03	0.04	0.03	0.03	0.04	0.03	0.03	0.03	0.03	0.02
Gender (0 = male)				0.44***	0.06	0.21	0.44***	0.06	0.21	0.38***	0.06	0.18
Sexual identity (0 = gay)				-0.08	0.09	-0.02	-0.00	0.10	-0.00	0.04	0.10	0.01
Queer factor				-0.04	0.05	-0.02	-0.05	0.05	0.02	-0.03	0.05	-0.01
Sociosexual orientation				0.09***	0.02	0.16	0.08	0.02	0.13	0.06**	0.02	0.10
Number one-time sex partners				-0.01	0.00	-0.05	-0.00	0.00	-0.04	-0.00	0.00	-0.03
Number sex partners last year				0.01	0.01	0.04	0.01**	0.01	0.04	0.01	0.01	0.03
Number lifetime sex partners				0.00	0.00	0.00	-0.00	0.00	-0.01	-0.00	0.00	-0.03
Masturbation frequency				0.02	0.01	0.05	0.02	0.01	0.05	0.02	0.01	0.04
Porn exposure frequency				0.03*	0.02	0.07	0.02	0.02	0.05	0.03	0.02	0.05
Anal sex appeal							0.09***	0.03	0.08	0.08*	0.03	0.07
Group sex appeal							0.01	0.03	0.01	0.01	0.03	0.01
Anonymous sex appeal							0.02	0.03	0.02	0.02	0.03	0.01
Discuss										0.16***	0.03	0.15
Relationship status (0 = single)										0.02	0.05	0.01
Intercept	2.06***	0.23		1.30***	0.27		1.17***	0.27		0.86***	0.27	
F value	5.34***			9.89***			8.93***			10.05***		
R^2	0.02			0.08			0.08			0.10		
Adj. R^2	0.02			0.07			0.07			0.09		
R^2 change				0.06***			0.01			0.02***		

*p<.05, **p<.01, ***p<.001; *df1* = 12, *df2* = 2,000.

Proposed Structural Models

Five different technosexual factors were explored throughout this study. Three factors (Photo-TS, Real-World-Partner-TS, and Video-TS) were partnered-arousal in nature, one factor was solitary-arousal in nature (Porn-TS), and one additional factor was non-arousal in nature (Sex-Info-TS). As these factors were derived, it became apparent that technology played more than a significant role in their formulation. However, since three behaviors were partner-arousal in nature, an exploration was launched to investigate the overall factors influencing partnered-arousal technosexuality. Initial variables were pulled from the full regression models for Photo-TS, Real-World-Partner-TS, and Video-TS. Related measures were then grouped to form latent factors, the effects of which were then analyzed using statistical package AMOS 19.0 to examine participation in partnered-arousal TS. Variables in the model include gender, same-gender sexuality, sex history, communal needs fulfillment, participation in sexual behaviors, and appeal of deviant behaviors, and partnered-arousal technosexuality.

To evaluate the data-model fit, joint cutoff criteria for fit indexes as recommended by Hu and Bentler (1999) and Keith (2006) were used. A model is considered to be a good fit when the Goodness of Fit Index (GFI), the comparative fit index (CFI), and the Tucker-Lewis index (TLI) are greater than 0.95, though values over 0.90 represent an adequate fit. Furthermore, a model is also assessed by the root mean square error of approximation (RMSEA) and the standardized root mean square residual (SRMR). Models with RMSEA below 0.05 suggest a good fit, while an RMSEA below 0.08 represents an adequate fit. Keith (2006), citing Hu and Bentler (1999), observes that SRMR is “among the best of the fit indexes,” with values less than 0.08 suggesting a

good data-model fit (p. 270). Additionally, assumptions of linearity and multivariate normality were assessed to be satisfactory, such that skewness was less than 3.00 and kurtosis was smaller than 10.00 for endogenous variables (e.g., Kline, 1998). Furthermore, since the sample is sufficiently large for the overall model ($N = 2013$), violations of non-normality are not of particular concern (Amemiya & Anderson, 1990). Mean substitutions were used to impute missing data where missing cases were less than 5% of the total cases ($N < 100$).

Figure 9 displays a solved measurement model for partnered-arousal technosexual behaviors. Estimations for the initial model indicate an unsatisfactory data fit. Figure 10 displays an alternative measurement model in which gender and same-gender sexuality are entered as latent rather than categorical variables (as they were in Figure 9). This results in a better data-model fit. In Figure 10, the amount text messages sent and received, sexual history, and the appeal of deviant behaviors all predict participation in partnered-arousal technosexuality. Gender, same-gender sexuality, and communal need fulfillment are mediated by deviant behavior appeal, such that appeal increases for male respondents as well as for those respondents who indicate a higher degree of same-gender sexuality and communal need fulfillment. Appeal of deviant behavior, in turn, is mediated by sexual history such that as appeal increases so, too, does the number respondents' number of sexual partners.

The latent variable gender was constructed using the observed variables sex at birth and gender identity. Each variable was recoded along a gender scale from female (1) to male (3). Any observation of intersexuality (in the case of sex at birth) or gender-

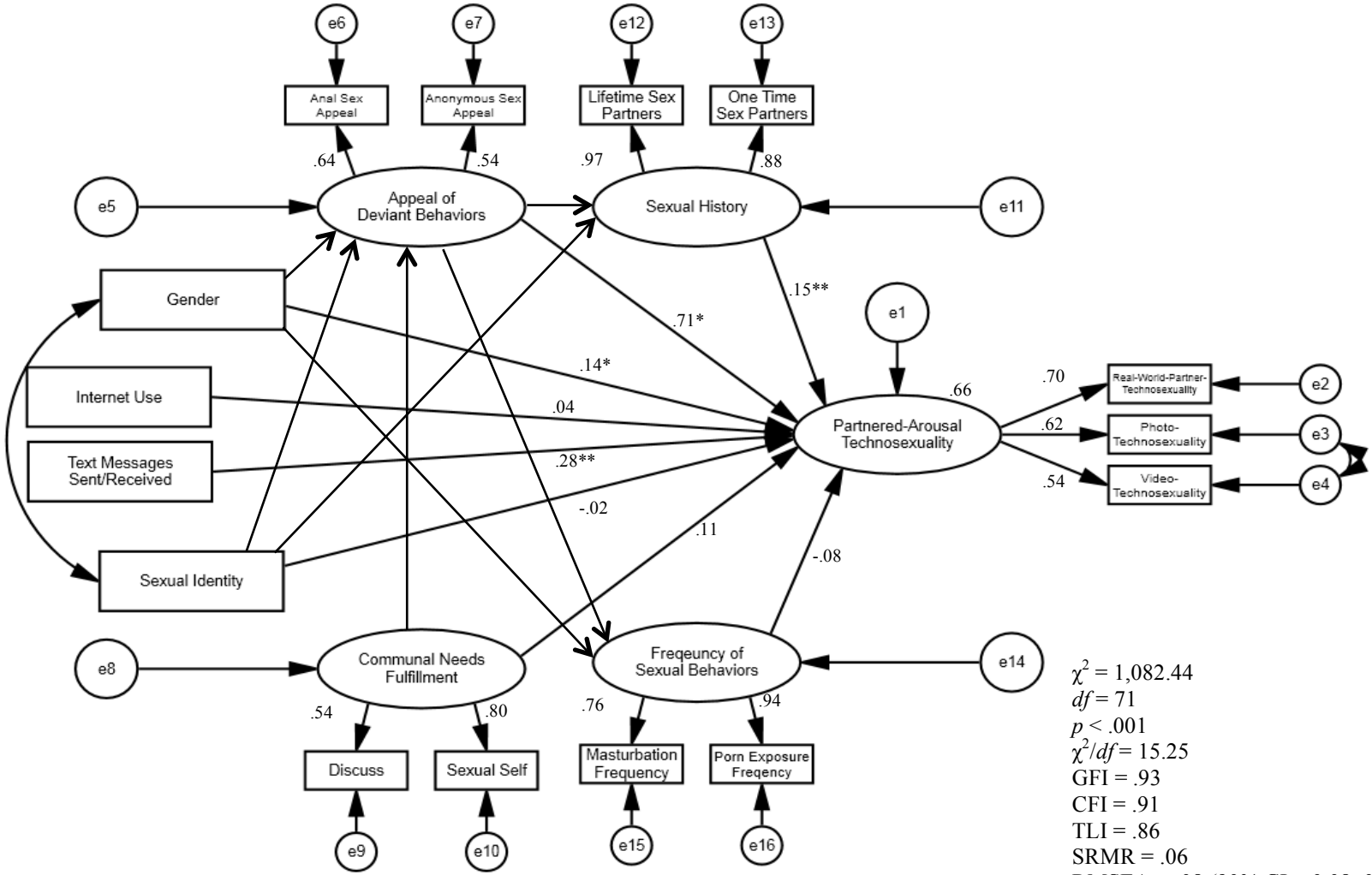


Figure 9. Solved measurement model for partnered-arousal technosexuality. Arrows between variables other than *Technosexuality* represent significant relationships ($p < .001$), though estimates have been suppressed for the sake of clarity. * $p < .001$, ** $p < .01$.

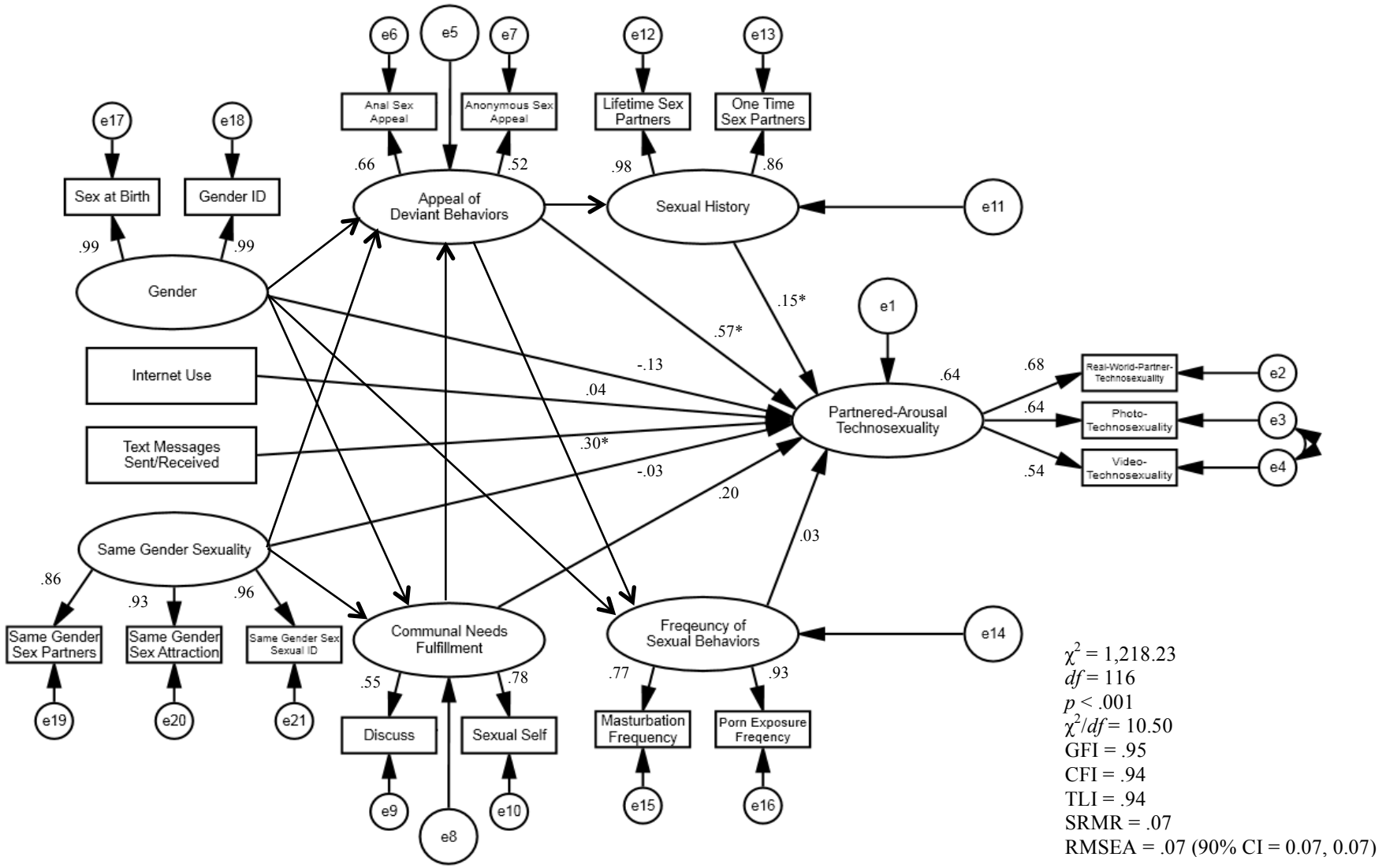


Figure 10. Solved alternative measurement model for partnered-arousal technosexuality. Arrows between variables other than *Technosexuality* represent significant relationships ($p < .001$), though estimates have been suppressed for the sake of clarity. * $p < .001$.

nonconformity (in the case of gender identity) was demarcated as falling somewhere between female and male (and was thus labeled 2).

The latent variable same-gender sexuality was constructed from three observed variables: self-identification, same-gender sexual attraction, and same-gender sex partners. Self-identification terms were recoded along a scale from straight (1) to gay or lesbian (3). Terms such as bisexual and queer were demarcated as falling between these two poles (and were thus labeled 2). Same-gender attraction was constructed from the gender composite variable, sexual identity, and gendered attraction (1 = exclusively opposite-gender attraction, 5 = exclusively same-gender attraction). For those cases where attraction was ambiguous (e.g., a bisexual trans-identified respondents), a mean substitution was imputed ($N = 13$). Same-gender sex partners was coded based on whether a respondent had no same-gender sex partners (1), both same-gender and opposite-gender sex partners (2), or only same-gender sex partners (3). The gender composite variable, sexual identity, and number of male and female sex partners were used to construct the measure.

Finally, Figure 11 displays a solved alternative model for partnered-arousal technosexuality where all the latent predictor variables are entered as exogenous, covarying factors. Of the three models, the one represented in Figure 11 displays the best data-model fit. In this model, appeal of deviant behaviors is the strongest predictor of partnered-arousal technosexuality ($\beta = 0.97$). Other significant predictors include frequency of solitary-arousal sexual behaviors ($\beta = -0.25$) and gender ($\beta = -0.15$). Same-gender sexuality, need fulfillment, and sexual history are mediated by the three main effects, and, therefore, indirectly affect partnered-arousal technosexuality. Moreover, in

addition to the variables entered as covariates, the three direct effect latent variables covary.

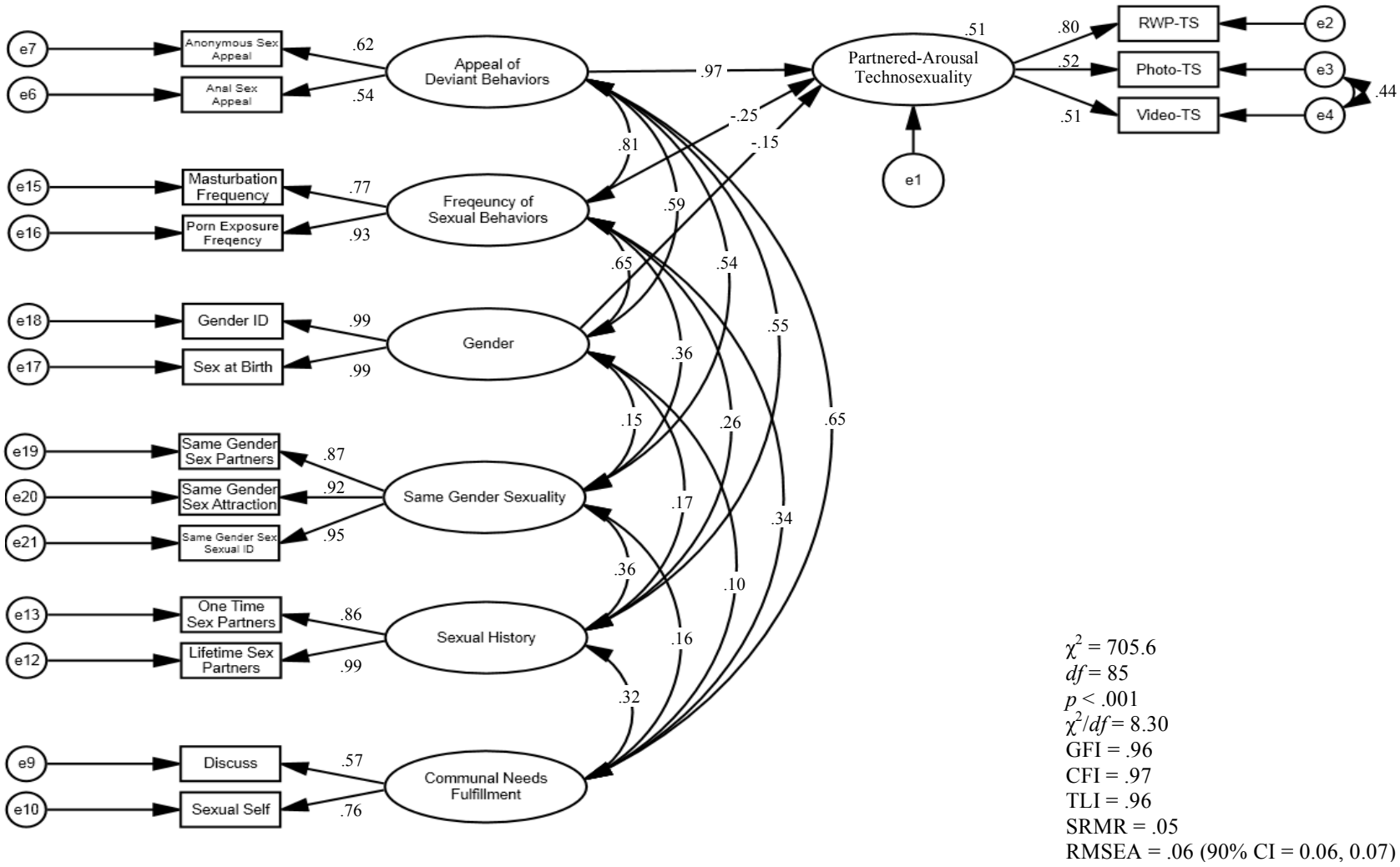


Figure 11. Solved covariant measuement model for partnered-arousal technosexuality. All relationships are significant at $p < .001$.

CHAPTER 6: DISCUSSION AND CONCLUSIONS

The purpose of this study was to examine the convergence between communication technologies and sexuality. Sexuality is a social phenomenon that encompasses a broad range of terms, behaviors, and practices. Communication technologies refer to those tools, systems, and devices devised to facilitate mediated interpersonal communication. This study has effectively demonstrated that technology plays a significant role in the contemporary sexual experience, though, admittedly, this role is larger for some groups than it is for others. The LGBT community is one such group for whom technology is becomingly increasingly significant where sexuality is concerned. However, as this study also shows, even within the LGBT community participation is not uniform and varies markedly by other demographic characteristics.

This study explored of technologically mediated sexual behaviors, or as they were referred to throughout this investigation technosexual behaviors. In order to study this phenomenon, it was necessary to develop these measures in order to gauge respondents' frequency of participation. Development of measures relied on a mixture of sources, from the extant literature to personal narratives. Since technology was the primary focus of this study, measures were originally organized by device (computer, cell phone, smartphone, etc.). This meant that certain measures were repeated multiple times, given their plausibility of existence by device type. Data were collected over the course of six months, after which I factor analyzed the technosexual measures to discover that, consistent with the existing literature (e.g., Shaughnessy et al., 2011), they seemed to be organized primarily by arousal type. This means that factors could fall into one of three

categories: partnered-arousal activities, solitary-arousal activities, and non-arousal activities.

For this study there were three partnered-arousal factors, one solitary-arousal factor, and one non-arousal activity. The partnered-arousal arousal factors were composed of different behaviors measured across a host of technological platforms. Each factor was named for a trait or characteristic that accounted for the variables that loaded onto it. The first factor was comprised of the use of a desktop or laptop computer, a smartphone, or a tablet to use the internet to search for as well as chat with potential romantic interest and sex partners. Additionally, the Factor 1 also included the frequency with which respondents used the internet to meet partners with whom they then had sex. For this reason, Factor 1 was labeled Real-World-Partner-technosexuality or Real-World-Partner-TS for short. The variables that loaded onto Factor 2 included the sending and receiving of sexually explicit text and photo messages as well as the sending or emailing of nude or sexually explicit photos via a desktop or laptop computer. For this reason, Factor 2 was labeled Photo-technosexuality, or Photo-TS for short. The third factor was comprised of the sending and receiving of sexually explicit videos using a mobile phone or a desktop or laptop computer as well as the use of a video-based chat program such as Skype to engage in sexual behaviors. Factor 3, thus, was named Video-technosexuality, or Video-TS.

Factor 4 was composed of the use of a desktop or laptop computer, a smartphone, or a tablet to view pornographic materials. Thus, Factor 4 was labeled Pornographic-technosexuality, or Porn-TS for short. The final factor dealt with the use of a desktop or laptop computer, a smartphone, or a tablet to search the internet for non-explicit materials

and information about sex. As examples, respondents were provided with cues such as using the internet to search for information about birth control or condom usage. As such, this activity was labeled Sex-Info-technosexualty, or Sex-Info-TS.

It is important to observe that while these factors are grouped by arousal type, thus maintaining findings from the extant literature, the partnered-arousal activities also displayed subsequent degrees of empirical uniqueness and distinctiveness. Thus, arousal type seems to be merely the first step in classification. Technology was an important component for both Photo-TS and Video-TS, though, in the case of Real-World-Partner-TS, motivation was perhaps more important than technology. Motivation might be used to re-classify Photo-TS and Video-TS in subsequent studies. This possibility seems especially likely when considering the measures that played an important role in predicting participation in these behaviors.

For example, relationship status and sexual self-conceptualization were both important variables in predicting Photo-TS participation; the appeal of deviant sexual acts as well as the number of lifetime sex partners were significant predictors of Video-TS. Thus, Photo-TS might also be thought of as partnered-arousal, relationship-oriented technosexuality, and Video-TS might also be conceptualized as deviant-oriented technosexuality. Furthermore, there were also gender differences between these two factors. Female respondents were more likely to indicate Photo-TS participation while men were more likely to indicate participation in Video-TS. However, these attitudes, motivators, behaviors, and identity markers were also significant predictors of participation in several of the other technosexual factors derived in this study, suggesting that it is a combination of direct and indirect effects that will be most successful in

ultimately explaining technosexuality. Therefore, it is also important to consider how these forces and influences interact in the categorization and observation of these phenomena.

Technology and Sexuality: Convergence for Whom?

As the findings from this study indicate, the incidence of technosexuality was, among the entire sample population, relatively low. This finding is also consistent with the extant literature (e.g., Shaughnessy et al., 2011), which dictates that reports of technologically mediated sexual behaviors in mass media and the public press give the false impression that the frequency of such behaviors is much higher than it actually is. That said, this study also found that frequency of technosexual participation varied according to identity and demographic characteristics, the importance of different needs, and motivating factors, as well as attitudes about sex.

Relationship status was one such marker that played a significant role in predicting technosexual participation. Throughout this study, relationship status was dichotomously coded as either single or not single. Respondents labeled not single included those who reported that they were in a relationship, married, partnered, in a domestic partnership, divorced, widowed, and separated. Obviously, thus, the not single category accounted for much variance by relationship type; however, due to the numbers of respondents in each group as well as the statistical mandates for entering categorical variables into regression models, much of this variance was lost in the investigation. Still, even the dichotomously coded relationship status was a significant indicator across several of the full regression models. Let's now entertain a more in-depth consideration of the role relationship status plays in technosexuality.

In the case of Photo-TS, respondents labeled *not single* were more likely to indicate a higher frequency of participation than those who identified as single. A further analysis of relationship status and Photo-TS revealed that those respondents who are in a relationship were actually the most likely to participate in these behaviors. Single and partnered respondents were the second most likely to participate followed by divorced and married respondents. Thus, the role relationship status played in predicting Photo-TS seems to be, in part a least, a reflection of the effect of age, assuming that single and relationship-reporting respondents are likely to be younger than those who are either married or divorced. Still, the mean participation of respondents who reported being in a relationship is significantly higher than other groups, suggesting that age and relationship status combined play a large part in predicting Photo-TS. Furthermore, this conclusion is supported by the full regression model for this factor (see Table 50).

Relationship status played a decreasingly significant role in predicting other technosexual factors. In the case of Real-World-Partner-TS, for example, divorced respondents indicated the highest frequency of participation followed by single respondents. This is likely a reflection of the behaviors that were used to construct this factor, which, in addition to including the use of the internet to search for potential sex partners, also included the search for potential dates. This perhaps explains why divorced and single respondents reported the highest frequencies of participation. Participation in Video-TS was uniformly low, and relationship status was of no significance in indicating participation.

Though relationship status was not a significant predictor of Porn-TS, between group differences still surfaced. Perhaps unsurprisingly, single respondents as well as

those in a relationship indicated a higher frequency of participation than married respondents. Again, age may have played an important role here. In a somewhat surprising finding, partnered respondents indicated the highest frequency of Porn-TS participation, which is likely a reflection of the oversample of LGBTQ respondents in these data, whom are both more likely to report a partnered versus married relationship status and to look at pornographic materials more frequently than their straight counterparts. For Sex-Info -TS, relationship status was once again compounded with age, with single respondents as well as those in a relationship more likely to report a higher frequency of participation than married, partnered, or divorced respondents.

One of this study's primary focuses was the relationship between sexual identity and technology. The findings from this study suggest that, in general, LGBTQ respondents were more likely to report a higher frequency of technosexual participation than straight respondents. For the partnered-arousal behaviors, bisexual, gay, and queer male respondents consistently reported the highest participation means. Similarly, though not quite to the same degree as the men, bisexual, lesbian, and queer female respondents generally reported higher frequencies of partnered-arousal technosexuality than both straight men and women. Though post-hoc tests did not always indicate between group differences, it is important to recall that, on account of these data's violation of normality and homogeneity of variance, only those post-hoc tests that were able to account for such ANOVA assumption violations were used. Because such tests tend to be very strict in displaying between-group differences, error of the second kind, or failure to reject the null hypothesis based on the data, is a constant consideration. A larger sample of LGBTQ respondents might help to mend the type of error in future research.

Though this study focused on sexuality and sexual identity, one of its additional missions was to serve as an exploratory gateway. Accordingly, as briefly mentioned in Chapter 5, other demographic variables were also considered in the exploration of these factors; yet, with exception of a few notable measures, these terms were largely unrevealing. Race is an example of one such variable. Overall, between group-differences were only significant for one factor (Photo-TS), and even then only one group of respondents (Asian) indicated a statistically different mean from the other groups. Location (e.g., rural, small town, suburban, or urban) is another example that failed to produce any substantial significant between-group differences in technosexual participation. Thus, though the exploratory efforts of this study are important, they indicate that technosexuality is more than a matter of demographic considerations.

The structural models indicate that, regarding technosexuality, there are different a multitude of forces that help to predict technosexuality. The original theoretical model (Figure 1) proposed seven direct effect paths and 11 indirect effect paths. Of these, only four direct paths were significant: sexual history, the appeal of deviant behaviors, gender, and the amount of text messages sent and received. Specifically, the number of sexual partners, appeal of deviant behaviors, and the amount of text messages sent and received were all positively correlated with partnered-arousal technosexuality. Regarding gender, female respondents were more likely to indicate participation than trans or male respondents. As for indirect effects, gender, sexual identity, need fulfillment, and the appeal of deviant behaviors were all significant mediating variables.

In the original model (Figure 9), gender and sexual identity were entered as dichotomous variables in the original model. In subsequent models, the latent variable

same-gender sexuality was substituted for the observed variable sexual identity. Furthermore, gender was entered as a latent rather than an observed variable. As demonstrated in Figure 10, entering these terms as latent variables resulted in a better model-data fit.

In the final structural model (Figure 11) all the predictor variables were entered as exogenous covariates, resulting in a better model-data fit still. In this model, the direct effects were for the appeal of deviant behaviors, frequency of solitary-arousal sexual behaviors, and gender. As appeal of deviant behaviors increased so, too, did partnered-arousal technosexuality. Predictably, frequency of solitary-arousal sexual behaviors was negatively correlated with partnered-arousal technosexuality. As gender increased (i.e., moved towards maleness), participation decreased. In this best-fit model, same-gender sexuality, sexual history, and communal need fulfillment indirectly affected partnered-arousal technosexuality and were all positively correlated with the other predictor variables. Thus, as same-gender sexuality, the number of sex partners, and the importance of communal need fulfillment increased, so, too, did the appeal of deviant behaviors, frequency of solitary-arousal sexual behaviors, and gender.

Discoveries and Innovations

On account of the exploratory nature of this study, several surprising findings came to surface. These findings, the implications of which range from the abstraction of the study's main ideas to their operationalization and measurement, are considered at present. In addition to such findings, the study's major innovations are also considered in this section, particularly through their implications for queer empirical scholarship.

One of this study's main discoveries involves needs and the ways in which they might affect or predict sexual behavior. In particular, this study expanded the traditional measurement of communal needs to include the need to discuss one's sexual experiences with friends. In several of the full regression models, this need was a significant predictor of technosexuality, even controlling for collective or group self-esteem. This means that, regardless of whether respondents identified with a particular social group, there was still a need to discuss sexual experiences. Though traditionally in the West sex has been socially constructed as private and shameful, these data indicate that there are shifting cultural norms about the expectancy of privacy where sex is concerned. Furthermore, these data support the claim that sexual acts are social acts and carry social currency; these acts don't occur in isolation, but rather as a part of everyday interpersonal interactions.

This may suggest why, in part at least, gender did not play a more significant role in predicting technosexual participation. In keeping with the theory of sexual scripts, this study found that, on average, men were more likely than women to indicate a higher frequency of technosexuality; however, as demonstrated in Table 26, the effect size of gender on technosexuality was relatively low, except in the case of solitary-arousal behaviors (i.e., Porn-TS). Thus, while these findings maintain the argument that is it more socially expected for men to report sexual experiences than women, this expectation, once again with exception of pornography exposure, appears to be waning. Though by itself it was relatively uninformative, gender combined with sexual identity resulted in substantially larger effect sizes for technosexuality (see, for example, Table 27). Still, in terms of sexual scripts, these findings generally mirror those of gender by itself. Thus,

bisexual, gay, straight, and queer men reported higher frequencies of technosexual participation than their female counterparts. In several instances, however, it worth noting that bisexual, lesbian, and queer female respondents indicated higher frequencies than straight males, thereby reaffirming the relationship between queer individuals and technology.

This study's inclusion of monogamy as a focal point was purposeful. As several of the full regression models revealed, the appeal of various monogamous and non-monogamous arrangements was a factor in predicting technosexual participation. Situating monogamy as a heteronormative institution helps to begin to make sense of these data. In the past, it has been common to link non-monogamous arrangements with gay men and polyamory, thereby also linking such relationship types with deviance, even if only by proximity. What these date indicate, however, is that though relationship appeal was fairly uniform from one type to the next (e.g., the majority of respondents, regardless of sexual identity, found the idea of monogamy somewhat or very appealing), between group persisted, even between straight female and straight male respondents. Thus, while relationship appeal may be explained in part by sexual identity, it also affected by gender identity. Finally, as the full regression models show, monogamy appeal was often negatively correlated with arousal-oriented technosexual behaviors, thus adding to the argument that such behaviors are socially constructed as deviant.

One of this study's chief innovations is the empirical study of sexual identification, behavior, desire and perceived incongruity, otherwise known as the queer factor. The queer factor, short for queer factor, is a formal measurement of the discord between the three different dimensions of sexual identity as articulated by this study. In

order to arrive at a formal measurement of this term, however, perceived incongruities first had to be established and measured. The first task was to establish finite dimensions for normal (i.e., accepted or anticipated) behaviors and desires based on a given identification. While the literature in this area is vast (the assumption that sexuality is fluid and that social identities are approximations of sexual desires and behaviors is, after all, one of the fundamental tenets of queer theory), relatively few—if any—studies have made an attempt to empirically establish such boundaries, let alone investigate the complex ways in which individuals violate them. Such transgressive occurrences are, however, observable and can be conceptualized as instances of queerness.

In order to establish what is considered a deviant sexual behavior or desire for a given identification, respondents were asked to assess series of scenarios comprised of different terms of sexual identification paired with various behaviors or desires. The use of a forced-choice Likert scale required respondents to determine the degree to which a particular scenario was expected or unexpected, given the respondents' assumptions about what it means to claim a specific sexual identity. Results from this pre-test were then used to evaluate whether instances of sexual identity-behavior and sexual identity-desire in the sample population were incongruous and, if so, the degree to which they were perceived as incongruous. The sum of measured observations of incongruity was then totaled for each respondent, thus resulting in the queer factor.

Queer factor was a predictor of technosexuality for only one factor: Photo-TS. Otherwise, the measure did not play a significant role in predicting technosexual participation. This fact may be partially explained by the types of behaviors that respondents labeled incongruous when paired with a given sexual identity. For instance,

respondents found having no sex partners, regardless of gender, to be incongruous with claiming a sexual identity. Thus, a higher queer factor score may be indicative of a lack of sexual experience, which, in turn, correlates with a certain degree of perceived identity-behavior incongruity. Conceptually, queer factor scores were linked to technology use (and, in particular, internet use) on account of marginalization and exploration. For example, desires that do not correlate with a claimed identity may be explored inconspicuously using the internet.

Finally, this study made a concerted effort to represent and include transgender-identified individuals as part of the analysis. Throughout the study, trans was treated as a gender category and, thus, was separate from sexual identity. The majority of trans respondents identified as queer, with considerably fewer identifying as bisexual, gay, lesbian, and straight. The relatively small number of bisexual, gay, lesbian, and straight trans respondents (exactly five respondents per category) call into question the results of between group comparisons for these groups. Thus, the inclusion of *trans* as a gender label in this study was both a success and a failure. It was successful insofar as trans bodies were not simply labeled as other and compared throughout to male or female bodies; however, as transgender was not a direct focus of this study, relatively little revelatory information about trans individuals came to fruition. Future empirical sexuality studies should continue to make space for gender identities that are not represented by the traditional gender binary.

Limitations and Future Research

Though this study makes many important contributions, it is not without its limitations. The first major limitation has to do with those findings pertaining to LGBTQ

individuals. Since the majority of LGBTQ respondents in the population were not sampled at random, it is unadvisable to presume that findings related to LGBTQ identities are generalizable. This does not mean, however, that these findings do not contribute to a better understanding about the relationship between LGBTQ individuals and technology. On the contrary, the findings showcased throughout this study are highly revelatory about the queer community in general as well as significant between group differences that exist within the community. The challenges associated with collecting a random sample of LGBT respondents confound the generalizability of most empirical studies in which this group is the focus. Perhaps on account of this fact, there is a dearth of empirical studies that concentrate on queer community. Thus, it is important that future research in the field of LGBTQ studies continues to make use of both quantitative and qualitative empirical methodologies to investigate research questions about the queer community.

Another one of this study's major limitations concerned the ways in which pre-factor analysis technosexual behaviors were derived. These behaviors were derived chiefly from previous research—some quantitative (e.g., the previous work done on online sexual behaviors), but most were qualitative or anecdotal. In the future, focus groups and in-depth interviews should be conducted to produce a comprehensive list of behaviors that details the complex and varied ways in which individuals incorporate technology into their sex lives. As this analysis has demonstrated that technosexual participation varies highly by gender identity and sexual identity, results from group-based research might considerably benefit from the formation of groups based on these characteristics.

The coefficients of determination for the full regression models displayed a wide range of explanatory power. The full model for pornography-technosexuality, for example, explained nearly 70% of sample variance, which the full model for video-technosexuality explained roughly 15% of the sample variance. This range of coefficients suggests that, for certain technosexual factors, there is still a wide range of variance to be explained. Future studies in this area, thus, would strongly benefit from exploring other variables that might also affect technosexuality, including motivations, attitudes, and behaviors that were not measured in this study. The hypothesized relationship between technosexuality and sociosexual orientation, for example, though significant at the bivariate level, failed to maintain almost any level of significance in the full regression models, indicating that other variables explained the variance originally attributed to it. Other comparable scales (e.g., the Sexual Attitudes Scale, which is a measurement of erotophobia and erotophilia, Hudson, Murphy, & Nuris, 1983) may account for different and sustained levels of sample variance, thereby increasing the coefficients of determination and, thus, the explanatory power of the models.

These data are a reflection of the norms and values of the culture in which they are occurring as well as the methodology that was used to capture them. In the context of this study, that culture is primarily a Western one with its own dominant and pervasive ideas about sexuality and sexual behaviors. This affects the study in a variety of ways. First, it affects the willingness of respondents to complete the questionnaire and to do so honestly. In survey research, women traditionally respond more frequently than men. This finding was sustained by the current study, with female respondents comprising about 63% of the sample. In addition to email campaigns, the questionnaire was

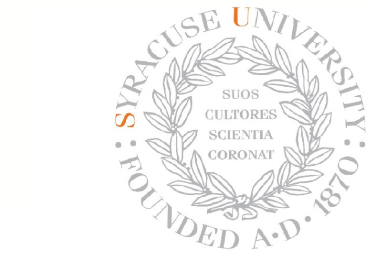
distributed via numerous listservs and social networking profiles. Thus, the overall response rate is difficult to estimate. For the email campaigns, response rates ranged from 10% to 20%. In web surveys, the response rate vary considerably, ranging anywhere from 15% to 75% (Sue & Ritter, 2007, p. 8). Therefore, these findings should be scrutinized in terms of their generalizability, but lauded for their revelatory properties.

Lastly, this study, by design, was exploratory in nature. As previously noted, there is a dearth of extant literature in this area, and much of what does exist is not empirical in nature. This study servers an important role in attempting to fill that void in the literature as well as to lay a foundation for future research of this kind. The proposed theoretical and alternative structural models presented in this study have much to offer future communications, health, and queer studies researchers in terms the social and cultural forces that influence technosexual behavior. Finally, as I believe I have demonstrated throughout this study, the field of mass communications is uniquely poised to tackle the wealth of opportunities and future research on the topic of technosexuality that have yet to be undertaken. The interdisciplinary theoretical and methodological approaches that are inherent to mass communications research engender the creative thinking that this kind of research necessitates. It is by means of this creative spirit, thus, that future research on technosexuality will continue to reveal how technology is altering our lives, changing the world in which we live, and offering us new and heretofore unseen possibilities for human connection.

APPENDIX A

QUESTIONNAIRE

Technology, Sexuality, and Behavior



Informed consent

Notice of informed consent:

My name is John Wolf. I am a graduate student at Syracuse University. I study communications, and I am inviting you to participate in a research study. Involvement in the study is voluntary, so you may choose to participate or not. This page will explain the study to you, and please feel free to ask questions about the research if you have any. I will be happy to explain anything in detail if you wish. You can reach me at jmwolf03@syr.edu.

Procedure: I am interested in learning about how behavior and technology use are related. In order to examine this relationship, I'm asking you to respond to a survey. This will take approximately 10-15 minutes of your time.

Risks: You are not at physical or psychological risk and should experience no discomfort resulting from answering the questionnaire. However, I should note that some of questions ask about your current and past sexual behaviors. Persons who are made uncomfortable by this subject should not volunteer to participate.

Benefits: There are no direct benefits for completing this questionnaire; however, your participation helps me to further understand the relationship between behaviors and technology use.

Confidentiality: All information gathered from the study will remain confidential. Your identity will not be disclosed to any unauthorized persons; only the researcher will have access to the research materials, which will be kept in a locked drawer. All data will be analyzed and discussed in aggregate only. Furthermore, since the data will be obtained anonymously, there is no way your responses can be linked to you.

Withdrawal: Participation in this study is voluntary; refusal to participate will involve no penalty. You are free to withdraw consent and discontinue participation in this project at any time.

Questions: If you have any questions concerning the research project and/or in the case of injury due to the project, you can email Dr. Pam Shoemaker (faculty advisor for this

project) at snowshoe@syr.edu. If you have any questions regarding your rights as a participant, or if you have any questions, concerns, or complaints that you wish to address to someone other than the investigator, or if you are unable to reach the investigator, please contact the Syracuse University Institutional Review Board at 315-443-3013.

Upon completing the questionnaire, you will be invited to participate in a raffle for a $50 Amazon.com gift card. Simply follow the instructions at the end of the questionnaire in order to enter the drawing. If you choose to withdraw from the study, you still may participate in the drawing. Simply proceed to the final page and follow the instructions.

You should print a copy of this informed consent for you own personal records*

( ) By clicking this box, I acknowledge three things: I am at least 18 years old; I am voluntarily participating in this survey; and that I have read and understood "Informed Consent."

I am first interested in what types of technologies you own and how frequently you use them. The first set of questions will ask you about this topic.

---

1) Do you own a desktop computer?
( ) Yes

( ) No

( ) Prefer not to answer

2) Do you own a laptop computer?
( ) Yes

( ) No

( ) Prefer not to answer

3) Do you own a smartphone or a personal digital assistant? (for example, an iPhone, a BlackBerry, an iPod Touch, an Android, a Palm, etc.)?
( ) Yes

( ) No

( ) Prefer not to answer

4) Do you own a cellular/mobile telephone (not including a smartphone)?
( ) Yes

( ) No

( ) Prefer not to answer

5) Do you own a tablet device (for example, a netbook or an iPad)?
( ) Yes

( ) No

( ) Prefer not to answer

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6) During a typical week, how often do you use each of the following technologies?

	Not at all	Rarely	Occasionally	Frequently	Very frequently	Prefer not to answer
Desktop computer	( )	( )	( )	( )	( )	( )
Laptop computer	( )	( )	( )	( )	( )	( )
Tablet (netbook or iPad, for example)	( )	( )	( )	( )	( )	( )
Cellular phone (not including smartphones)	( )	( )	( )	( )	( )	( )
Smartphone (BlackBerry, Android, iPhone, for example)	( )	( )	( )	( )	( )	( )

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7) Thinking about your Internet usage during a typical week, how many hours per day on average do you spend using the Internet on a computer (this includes activities like writing emails, using social networking sites, viewing online videos, etc.)?
( ) Less than an hour

( ) 1

…

( ) 24

( ) Prefer not to answer

8) Thinking about the number of hours on average you spend per day using the Internet on a computer during a typical week, roughly how many of them are devoted to work or school related activities?
( ) Less than an hour

( ) 1

…

( ) 24

( ) Prefer not to answer

9) Thinking about the number of hours on average you spend per day using the Internet on a computer during a typical week, roughly how many of them are for personal (that is, non work-related) activities?

( ) Less than an hour

( ) 1

…

( ) 24

( ) Prefer not to answer

10) During a typical week, roughly how many text messages do you send on average per day?

_____

11) During a typical week, roughly how many text messages do you receive on average per day?

_____

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12) Please give your opinion on the following items:

	Strongly disagree	Somewhat disagree	Neutral	Somewhat agree	Strongly agree	Prefer not to answer
Technology gives people more control over their daily lives.	( )	( )	( )	( )	( )	( )
Products and services that use the newest technologies are much more convenient to use.	( )	( )	( )	( )	( )	( )
You like the idea of doing business via computers because you are not limited to regular business hours.	( )	( )	( )	( )	( )	( )
You prefer to use the most advanced technology available.	( )	( )	( )	( )	( )	( )

Technology makes you more efficient in your occupation.	( )	( )	( )	( )	( )	( )
You find new technologies to be mentally stimulating.	( )	( )	( )	( )	( )	( )
Technology gives you more freedom of mobility.	( )	( )	( )	( )	( )	( )

The next few questions are going to ask you about your identity, needs, and how important certain needs are to you.

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13) We are all members of different social groups or social categories. Some such groups and categories pertain to race, gender, sexual identity, ethnicity, nationality, and class. Consider your membership in those groups, and respond to the following statements on the basis of how you feel about those groups and your membership in them.

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Prefer not to answer
Overall, my group memberships have very little to do with how I feel about myself.	( )	( )	( )	( )	( )	( )
The social groups I belong to are an important reflection of who I am.	( )	( )	( )	( )	( )	( )
The social groups I belong to are unimportant to my sense of what kind of person I am.	( )	( )	( )	( )	( )	( )
In general, belonging to social groups is an important part of my self image.	( )	( )	( )	( )	( )	( )

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14) The following is a list of sexual needs. Please respond to how important each of the following needs is to you. Important needs are those that you care about or would cause you distress if they were unfulfilled.

	Not at all important	Unimportant	Neither important nor unimportant	Important	Very important	Prefer not to answer
The need for sexual satisfaction when you desire it.	( )	( )	( )	( )	( )	( )
The need for sexual fulfillment.	( )	( )	( )	( )	( )	( )
The need to kiss or touch someone you find physically attractive.	( )	( )	( )	( )	( )	( )
The need to feel a connection with your romantic and/or sexual partner.	( )	( )	( )	( )	( )	( )
The need to engage with your romantic and/or sexual partner.	( )	( )	( )	( )	( )	( )
The need to satisfy the desires of your romantic and/or sexual partners.	( )	( )	( )	( )	( )	( )
The need to feel desired sexually, even by people you don't know.	( )	( )	( )	( )	( )	( )
The need for others to find you physically attractive.	( )	( )	( )	( )	( )	( )
The need to feel desired by the people you have sex with.	( )	( )	( )	( )	( )	( )

15) Please read and give your opinion on the following items:

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Prefer not to answer
It's important that my friends are able to relate to my sexual experiences.	( )	( )	( )	( )	( )	( )
It's important that I can share my sexual desires and thoughts with others.	( )	( )	( )	( )	( )	( )
Having sex makes me feel desired.	( )	( )	( )	( )	( )	( )
I am more sexual than other people.	( )	( )	( )	( )	( )	( )
The need to satisfy my sexual urges is more important that most of my other needs.	( )	( )	( )	( )	( )	( )
I become irritable or bad-tempered if I don't have sex regularly.	( )	( )	( )	( )	( )	( )
I feel the need to discuss my sexual experiences with friends.	( )	( )	( )	( )	( )	( )

This next set of questions is going to ask you about your sexual activity and technology use.

People mean different things by sex or sexual activity. In this survey, "sex," "sexual activity" or "sexual experience" mean any mutually voluntary activity with another person that involved genital contact and sexual excitement or arousal (even if intercourse or an orgasm did not occur).

Activities such as close dancing or kissing without genital contact are not considered "sex," "sexual activity" or a "sexual experience" for the purposes of this survey.

Also, these questions do not refer to occasions where force was used and activity was against someone's will.

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16) During the past 12 months, how frequently on average would you say you used your computer to do each of the following activities?

	Never	Rarely	Sometimes	Frequently	Very frequently	Prefer not to answer
Seek out potential dates (for example, via dating Websites).	( )	( )	( )	( )	( )	( )
Seek out potential sex partners (via Websites explicitly intended for this purpose).	( )	( )	( )	( )	( )	( )
Chat or instant message with potential sex partners.	( )	( )	( )	( )	( )	( )
E-mail or send nude or sexually explicit photographs or videos of yourself.	( )	( )	( )	( )	( )	( )
Post to the Web a nude or sexually explicit video of yourself	( )	( )	( )	( )	( )	( )
Meet someone with whom you then had sex.	( )	( )	( )	( )	( )	( )
View pornographic materials.	( )	( )	( )	( )	( )	( )
Engage in Web-based video sex (for example, performing sexual behaviors while using Skype).	( )	( )	( )	( )	( )	( )

17) During the past 12 months, how frequently on average would you say you used your cell phone or smartphone to do each of the following activities?

	Never	Rarely	Sometimes	Frequently	Very frequently	Prefer not to answer
Send sexually explicit text messages.	( )	( )	( )	( )	( )	( )
Receive sexually explicit text messages.	( )	( )	( )	( )	( )	( )
Send nude or sexually explicit photos of yourself.	( )	( )	( )	( )	( )	( )
Receive nude or sexually explicit photos.	( )	( )	( )	( )	( )	( )
Send nude or sexually explicit videos of yourself.	( )	( )	( )	( )	( )	( )
Receive nude or sexually explicit videos.	( )	( )	( )	( )	( )	( )

18) During the past 12 months, how frequently on average would you say you used your smartphone, PDA, or tablet to do each of the following activities?

	Never	Rarely	Sometimes	Frequently	Very frequently	Prefer not to answer
Search for sexual partners using a smartphone application (for example, Grindr).	( )	( )	( )	( )	( )	( )
To view pornographic materials.	( )	( )	( )	( )	( )	( )
To search for information on sex (for example, condom use, birth control, sexual positions, etc.).	( )	( )	( )	( )	( )	( )
Meet someone with whom you then had sex.	( )	( )	( )	( )	( )	( )

Engage in Web-based video sex (for example, performing sexual behaviors while using Skype).	( )	( )	( )	( )	( )	( )

19) If you did own a smartphone or tablet device, how frequently do you think you would use it to do each of the following activities?

	Never	Rarely	Sometimes	Frequently	Very frequently	Prefer not to answer
Search for sexual partners using a smartphone application (for example, Grindr).	( )	( )	( )	( )	( )	( )
To view pornographic materials.	( )	( )	( )	( )	( )	( )
To search for information on sex (for example, condom use, birth control, sexual positions, etc.).	( )	( )	( )	( )	( )	( )
Meet someone with whom you then had sex.	( )	( )	( )	( )	( )	( )
Engage in Web-based video sex (for example, performing sexual behaviors while using Skype).	( )	( )	( )	( )	( )	( )

The next few pages are going to ask you some questions about your sexual identity and your opinion on some sexual practices.

---

20) Thinking about your sexual orientation, which of the following best describes your sexual identity? (Please note that some duplicates exist in the following list. For example, you will see both "heterosexual" and "straight." Please choose the term that you would use to describe yourself .)

( ) Bisexual

( ) Gay

( ) Heterosexual

( ) Homosexual

( ) Lesbian

( ) Queer

( ) Straight

( ) Other (please specify):: _____

( ) Prefer not to answer

---

21) How old were you when you first remember feeling same-gender desires or attractions?
( ) 1

( ) 2

…

( ) 99

( ) 100

( ) Prefer not to answer

22) At what age did you first share with another person that you have same-gender desires or attractions?
( ) I have not shared this information with anyone else.

( ) 1

( ) 2

…

( ) 99

( ) 100

( ) Prefer not to answer

23) How did you first share this information with someone else?
( ) Email

( ) Face to face conversation

( ) Instant message/online chat

( ) Telephone/cellular phone (verbal conversation)

( ) Text message

( ) Skype/other video interface

( ) I have not shared this information with anyone else.

( ) Other

( ) Prefer not to answer

---

24) Do you disclose your sexual identity in your Facebook profile?
( ) Yes

( ) No

( ) I do not have a Facebook profile

( ) Prefer not to answer

25) Do you post about topics--whether personal or news stories--related to your sexual identity on Facebook?
( ) Yes

( ) No

( ) I do not have a Facebook profile

( ) Prefer not to answer

26) Do you disclose your sexual identity in your Twitter bio?
( ) Yes

( ) No

( ) I do not have a Twitter account

( ) Prefer not to answer

27) Do you tweet about topics--whether personal or news stories--related to your sexual identity?
( ) Yes

( ) No

( ) I do not have a Twitter account

( ) Prefer not to answer

---

28) In general, are you sexually attracted to:
( ) Only men

( ) Mostly men

( ) Both men and women

( ) Mostly women

( ) Only women

( ) Prefer not to answer

29) How appealing would you rate each of the following activities?

	Not at all appealing	Not appealing	Somewhat appealing	Very appealing	Prefer not to answer
Having sex with more than one person at the same time.	( )	( )	( )	( )	( )
Having sex with a person of the same sex or gender.	( )	( )	( )	( )	( )
Having sex with someone you don't personally know.	( )	( )	( )	( )	( )

30) Thinking about the following sexual activities, how appealing would rate each of them?

	Not at all appealing	Not appealing	Somewhat appealing	Very appealing	Prefer not to answer
Partner stimulating your anus with his/her fingers.	( )	( )	( )	( )	( )
Stimulating a partner's anus with your fingers.	( )	( )	( )	( )	( )
A partner performing anal oral sex (rimming) on you.	( )	( )	( )	( )	( )
Performing anal oral sex (rimming) on a partner.	( )	( )	( )	( )	( )
Receiving anal intercourse.	( )	( )	( )	( )	( )
Giving anal intercourse.	( )	( )	( )	( )	( )

31) Thinking about your ideal romantic or sexual relationship with one other person, how appealing would you rate each of the following arrangements?

	Not at all appealing	Not appealing	Somewhat appealing	Very appealing	Prefer not to answer
Monogamy (where you and your partner only have sex with one another).	( )	( )	( )	( )	( )
Consensual non-monogamy (where you and your partner agree to have sex with one another as well as other people).	( )	( )	( )	( )	( )
Non-consensual non-monogamy (where you and/or your partner engage in sex outside the relationship without receiving permission or informing one another of the event).	( )	( )	( )	( )	( )

The next set of questions is going to ask you about your past sexual activity.

Once again, "sex," "sexual activity," or "sexual experience" are defined as any mutually voluntary activity with another person that involved genital contact and sexual excitement or arousal (even if intercourse or an orgasm did not occur).

Activities such as close dancing or kissing without genital contact are not considered "sex," "sexual activity" or a "sexual experience" for the purposes of this survey.

Also, these questions do not refer to occasions where force was used and activity was against someone's will.

---

32) How many sex partners have you had in the last 12 months?

( ) 0

( ) 1

…

( ) 99

( ) 100

( ) More than 100

( ) Prefer not to answer

33) About how often did you masturbate during the past 12 months?
( ) Not at all

( ) Once or twice

( ) 3-11 times

( ) Once a month

( ) 2-3 times a month

( ) Weekly

( ) 2-3 times a week

( ) 4 times or more a week

( ) Prefer not to answer

34) About how often did you view pornographic materials during the last 12 months (note: pornographic materials refers to any material viewed specifically for the purposes of sexual excitement or arousal)?
( ) Not at all

( ) Once or twice

( ) Once a month

( ) 2-3 times a month

( ) Weekly

( ) 2-3 times per week

( ) 4-6 times per week

( ) Everyday

( ) Prefer not to answer

---

35) Roughly how many sexual partners have you had in your lifetime?
( ) 0

( ) 1

( ) 2

…

( ) 99

( ) 100

( ) More than 100

( ) Prefer not to answer

36) With how many different partners have you had sexual encounters on only one occasion?
( ) 0

( ) 1

( ) 2

…

( ) 99

( ) 100

( ) More than 100

( ) Prefer not to answer

37) How many female partners have you had sex with during your lifetime?
( ) 0

( ) 1

( ) 2

…

( ) 99

( ) 100

( ) More than 100

( ) Prefer not to answer

38) How many male partners have you had sex with during your lifetime?
( ) 0

( ) 1

( ) 2

…

( ) 99

( ) 100

( ) More than 100

( ) Prefer not to answer

Please respond to the following items.

39) Sex without love is OK.
( ) 1 (Strongly disagree)

( ) 2

( ) 3

( ) 4

( ) 5 (Neutral)

( ) 6

( ) 7

( ) 8

( ) 9 (Strongly agree)

( ) Prefer not to answer

40) I can imagine myself being comfortable and enjoying casual sex with different partners.
( ) 1 (Strongly disagree)

( ) 2

( ) 3

( ) 4

( ) 5 (Neutral)

( ) 6

( ) 7

( ) 8

( ) 9 (Strongly agree)

( ) Prefer not to answer

41) I would feel comfortable if I learned that my closest non-sexual friend was in a consensual, non-monogamous relationship.
( ) 1 (Strongly disagree)

( ) 2

( ) 3

( ) 4

( ) 5 (Neutral)

( ) 6

( ) 7

( ) 8

( ) 9 (Strongly agree)

( ) Prefer not to answer

42) I believe that monogamy is more likely than other romantic arrangements to result in a successful long-term relationship.
( ) 1 (Strongly disagree)

( ) 2

( ) 3

( ) 4

( ) 5 (Neutral)

( ) 6

( ) 7

( ) 8

( ) 9 (Strongly agree)

( ) Prefer not to answer

43) I would be willing to explore a non-monogamous relationship arrangement if it was important to my significant other.
( ) 1 (Strongly disagree)

( ) 2

( ) 3

( ) 4

( ) 5 (Neutral)

( ) 6

( ) 7

( ) 8

( ) 9 (Strongly agree)

( ) Prefer not to answer

44) I do not want to have sex with a person until I am sure that we will have a long-term, serious relationship.
( ) 1 (Strongly disagree)

( ) 2

( ) 3

( ) 4

( ) 5 (Neutral)

( ) 6

( ) 7

( ) 8

( ) 9 (Strongly agree)

( ) Prefer not to answer

45) How often do you have fantasies about having sex with someone with whom you do not have a committed romantic relationship?
( ) Never

( ) Very seldom

( ) About once every two or three months

( ) About once a month

( ) About once every two weeks

( ) About once a week

( ) Several times per week

( ) Nearly every day

( ) At least once a day

( ) Prefer not to answer

46) How often do you experience sexual arousal when you are in contact with someone with whom you do not have a committed romantic relationship?
( ) Never

( ) Very seldom

( ) About once every two or three months

( ) About once a month

( ) About once every two weeks

( ) About once a week

( ) Several times per week

( ) Nearly every day

( ) At least once a day

( ) Prefer not to answer

47) In everyday life how often do you have spontaneous fantasies about having sex with someone you have just met?
( ) Never

( ) Very seldom

( ) About once every two or three months

( ) About once a month

( ) About once every two weeks

( ) About once a week

( ) Several times per week

( ) Nearly every day

( ) At least once a day

( ) Prefer not to answer

48) Have you ever been involved in a romantic and/or sexual relationship where you made an agreement not to get involved with anyone else, but you did so (either sexually or emotionally) anyway?
( ) Yes

( ) No

( ) Prefer not to answer

The final set of questions is going to ask you for some background information.

---

49) How would you describe the area of your primary residence over the past 12 months?
( ) Rural

( ) Small town

( ) Suburban

( ) Urban

( ) Other

( ) Prefer not to answer

50) How old did you turn on your last birthday?
( ) 18

( ) 19

( ) 20

…

( ) 99

( ) 100

( ) Prefer not to answer

51) What was your sex at birth?
( ) Female

( ) Intersex

( ) Male

( ) Other

( ) Prefer not to answer

52) Which of the following gender terms best describes your current gender identity?
( ) Female

( ) Genderqueer

( ) Male

( ) Transgender

( ) Other

( ) Prefer not to answer

53) What is the highest year of school that you've completed?
( ) 8th grade or below

( ) 9th grade

( ) 10th grade

( ) 11th grade

( ) High school graduate

( ) 1 year college

( ) 2 years college

( ) 3 years college

( ) College graduate

( ) Graduate school (MA/MS)

( ) Graduate school (JD/MD/PhD)

( ) Other

( ) Prefer not to answer

54) What is your race (check all that apply)?
[ ] African-American or Black

[ ] Asian

[ ] Caucasian or White

[ ] Latino or Hispanic

[ ] Middle Eastern

[ ] Native American

[ ] Pacific Islander

[ ] Other (please specify):

[ ] Prefer not to answer

55) How often do you attend religious services?
( ) Multiple times per week

( ) Once per week

( ) 2-3 times per month

( ) Once per month

( ) 5-11 times per year

( ) Less than 5 times per year

( ) Never

( ) Prefer not to answer

56) Which best describes your political views?
( ) Very liberal

( ) Liberal

( ) Somewhat liberal

( ) Moderate

( ) Somewhat conservative

( ) Conservative

( ) Very conservative

( ) Prefer not to answer

---

57) Please select the category that best describes your annual individual income.
( ) Less than $10,000

( ) $10,000-$19,999

( ) $20,000-$29,999

( ) $30,000-$39,999

( ) $40,000-$49,999

( ) $50,000-$59,999

( ) $60,000-$69,999

( ) $70,000-$79,999

( ) $80,000-$89,999

( ) $90,000-$99,999

( ) $100,00-$109,999

( ) $110,00-$119,999

( ) $120,00-$129,999

( ) $130,00-$139,999

( ) $140,00-$149,999

( ) More than $150,000

( ) Prefer not to answer

58) Please select the category that best describes your annual household income.
( ) Less than $10,000

( ) $10,000-$19,999

( ) $20,000-$29,999

( ) $30,000-$39,999

( ) $40,000-$49,999

( ) $50,000-$59,999

( ) $60,000-$69,999

( ) $70,000-$79,999

( ) $80,000-$89,999

( ) $90,000-$99,999

( ) $100,00-$109,999

( ) $110,00-$119,999

( ) $120,00-$129,999

( ) $130,00-$139,999

( ) $140,00-$149,999

( ) More than $150,000

( ) Prefer not to answer

59) Which of the following best describes your current marital status?
( ) Single (never married)

( ) In a relationship

( ) Married

( ) Partnered

( ) In a domestic partnership

( ) Divorced

( ) Separated

( ) Widowed

( ) Other

( ) Prefer not to answer

Thank You!

Thank you for completing this survey. In order to enter a drawing for a $50 Amazon.com gift card, please click on the link below to enter an email address where I can reach you during the next 4 to 6 weeks. The email address is entered on a separate form in a different database so that your responses here can't be linked to your email.

Thanks once again for your participation!

Click here to enter!

(Note: It isn't necessary to enter any text in the body of the email; simply supplying your email address will enter you into the drawing. If the above link does not work, please send an email to TechSurvey.SU@gmail.com with "Amazon.com gift card" as the subject.)

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EDUCATION

Ph.D. Mass Communications, 2012
S.I. Newhouse School of Public Communications, Syracuse University
Focus**:** Popular culture, technology, and social change
Dissertation: Technosexuality: Technology, Sexuality, and Convergence
Adviser: Pamela J. Shoemaker, Ph. D.

M.A. Television, Radio, and Film, 2008
S.I. Newhouse School of Public Communications, Syracuse University
Focus: Popular culture, television, and film criticism

B.A. French Language and Culture, 2004
Summa cum laude
Baldwin-Wallace College
Senior thesis: *La Maladie du Mâle* (Tr: A Malady Among Men)
Presidential scholarship recipient

PEER-REVIEWED PUBLICATIONS

Wolf, J. M. (in press). Resurrecting camp: Rethinking the queer sensibility. *Communication, Culture & Critique*.

Lysak, S., Cremedas, M., & **Wolf, J. M.** (in press). Facebook and Twitter in the newsroom: How and why local television news is getting social with viewers. *Electronic News*.

BOOK CHAPTERS

Wolf, J. M., & Schweisberger, V. N. (forthcoming). Should we stop believin'? *Glee* and the cultivation of essentialist identity discourse. In T. Carrilli & J. Campbell (Eds.). *A queer gaze: Media and the global LGBT community*.

MANUSCRIPTS UNDER REVIEW

Wolf, J. M., & Mandell, H. The pornification of public opinion: Exploring the relationship between pornography exposure and public opinion about sex scandals.

Wolf, J. M., Choch, T. M., Massullo, G. C., Schweisberger, V., & Wang, Y. Social media features on a local news website attract college-age audience.

PEER-REVIEWED CONFERENCE PRESENTATIONS

Wolf, J. M. (2012 May). Dimensions of messy engagement: When university-school partnerships bring digital media into urban schools. Panel discussant at the 2012 International Communication Association annual convention, Phoenix, Arizona.

Wolf, J. M., & Schweisberger, V. (2012 April). Should we stop believin'? *Glee* and the cultivation of essentialist identity discourse. Paper presented at the 2012 Popular Culture Association/American Cultural Association annual conference, Boston, Massachusetts.

Wolf, J. M. (2011 November). We hopeful addicts: Alcohol and community in queer contexts. Paper presented at the 2011 National Communication Association annual convention, New Orleans, Louisiana.

Lysak, S., Cremedas, M., & **Wolf, J. M.** (2011 August). Facebook and Twitter in the newsroom: How and why local television news is getting social with viewers. Paper presented at the 2011 Association for Education in Journalism and Mass Communication annual conference, St. Louis, Missouri.

Wolf, J. M., & Mandell, H. (2011 May). In the bedroom and on the news: Predicting the effect of pornography exposure on sex scandal views. Paper presented at the 2011 International Communication Association annual convention, Boston, Massachusetts.

Wolf, J. M. (2010 November). A space for the rest of us? XTube and virtual representations of queer sexualities. Paper presented at the 2010 National Communication Association annual convention, San Francisco, California.

Wolf, J. M. (2010 March). Out in the blogosphere: Sexual identity and blogging. Paper presented at the 2010 Society for Cinema and Media Studies annual convention, Los Angeles, California.

Wolf, J. M. (2009 November). In or out: Stereotypes and entertainment on *Project Runway*. Paper presented at the 2010 National Communication Association annual convention, Chicago, Illinois.

Wolf, J. M. (2009 March). Pitching a tent: Camp as a queer artifact, gay indicator, and modern enemy. Paper presented at the 2009 Popular Culture Association/American Cultural Association annual conference, New Orleans, Louisiana.

Rogers, R., & **Wolf, J. M.** (2009 March). Frags and friendship: The social web of *Halo 3*. Paper presented at the 2009 Association for Education in Journalism and Mass Communication midwinter convention, Norman, Oklahoma.

Wolf, J. M., & Schweisberger, V. (2008 August). The queer frontier: Dual perspectives on primetime portrayals of gay representations. Paper presented at the 2008 Association for Journalism and Mass Communication annual conference, Chicago, Illinois.

TEACHING EXPERIENCE

TRF 696: RESEARCH FOR ENTERTAINMENT MEDIA, Fall 2011, Spring 2010

- Created a new syllabus for the course, which was selected by the full time faculty as the template for the revised research requirement for the Television, Radio, and Film (TRF) graduate curriculum
- Worked with approximately 20 M.A. students per semester to apply research towards the creative process and the development of film, television, and Web endeavors

- Taught both qualitative and quantitative research methods, offering students the maximum number of hands-on opportunities with methodologies

TRF 255: INTRODUCTION TO WRITING & PRODUCING, Spring 2011, Spring 2010
- Guided approximately 20 introductory production students per semester in developing production skills relating to lighting, editing, sound, shot composition, mise-en-scene, and effective storytelling
- Oversaw students' developments of their own creative projects, which included narrative pieces, experimental/avant-garde work, music videos, and documentaries
- Students' work has been selected to compete in competitive film festivals

TRF 530: PRODUCTION THEORY, Fall 2009
- Created a course investigating the influence of film, television, and media theory on the production of media texts
- Developed a syllabus that critically examined popular media texts through the eyes of classical film and television theory, including montage, genre, postmodernism, sound, race, and propaganda
- Guided approximately 10 graduate and upper-level undergraduate students through the design, execution, and showcasing of a creative project inspired by a theory studied during the course

COM 107: COMMUNICATIONS AND SOCIETY, Fall 2008
- Instructed over 70 first-year students in this introductory course surveying the contemporary media landscape
- Focused lectures on issues relating to media literacy and media and diversity, encouraging students to become more media literate students and consumers

QSX 112: SEXUALITIES, GENDERS, AND BODIES, Spring 2012
- Aided in course design for approximately 75 students, including film programming
- Networked students with LGBT groups/non-profits to promote the goals of the LGBT Studies Program and to encourage students' professional development

QSX 111: QUEER HISTORIES, COMMUNITIES, AND POLITICS, Fall 2011
- Led recitation sections on course materials for approximately 75 students
- Teaching appointment as part of services as graduate assistant for the LGBT Studies Program

COM 117: STORYTELLING, Spring 2009
- Trained approximately 20 first-year students on digital video equipment and editing software
- Graded students' writing and facilitated critical feedback sessions where students' work was evaluated

TEACHING ASSISTANT

- TRF 655: TELEVISION PRODUCTION, Summer 2008, 20 students (2 sections)
- TRF 155: SCRIPT, PICTURE, & SOUND, Spring 2008, Fall 2007, 20 students each
- TRF 451/651: FILMMAKING, Spring 2008, 15 students
- TRF 592: FILM BUSINESS, Fall 2007, 20 students
- TRF 545: TELEVISION AND RADIO PERFORMANCE, Fall 2007, 20 students

INVITED TALKS

- Technosexuality: Technology, Sexuality, and Convergence. (May 2012). Presented to Dissertation Defense Committee at Syracuse University, New York.

- Porn Taught Me Everything I Need To Know About Being Gay: The Socialization Effect of Pornographic Media Content on Gay Male Audiences. (March 2012). Talk given as part of Effects of Sex in the Media seminar, Syracuse University, New York.

- Media Literacy: The Making of a Music Video. (April 2011, 2012). Talk given annually to 60 sixth graders from Ed Smith School, Syracuse, New York.

- Fright Reactions to Mass Media. (February 2012). Talk given at Cleveland State University, Ohio.

- Direct Address and Multi-Camera Modes of Production. (November 2012). Talk given at Trinity University, San Antonio, Texas.

- The Queer Frontier: Dual Perspectives on Primetime Portrayals of Gay Representations. (April, September 2008). Talk given at Syracuse University, New York.

RESEARCH IN PROGRESS

Vicariously rejected: Framing effects and news coverage of political sex scandals
- Multi-stage experimental study examining the implications of the media's coverage of sex scandals on cultural conversations about monogamy, relationships, and sex

GRADUATE APPOINTMENTS

Research Assistant, Dept. of Television, Radio, and Film
Syracuse University, 2012 to present
Principal investigator: Dr. Michael Schoonmaker, Associate Professor
- Work as reviewer and editor on Dr. Schoonmaker's book about of media literacy in urban schools

Graduate Assistant, LGBT Studies Program
Syracuse University, 2011 to 2012
- Awarded graduate assistantship with the LGBT studies program for the 2011-12 school year
- Provide teaching assistant services to the Program's two introductory-level courses and assist with LGBT event programming across campus

Research Consultant, Dept. of Communications
Syracuse University, 2011
Principal investigator: Dr. T. Makana Chock, Associate Professor
- Co-authored a manuscript with Dr. Chock on how social networking functions affect readership on newspaper websites

Research Assistant, Dept. of Broadcast and Digital Journalism
Syracuse University, 2010

Principal investigator: Suzanne Lysak, Assistant Professor
- Co-authored "Facebook and Twitter in the newsroom: How and why local television news is getting social with viewers"
- Synthesized literature, created and distributed questionnaire for the project

Research Assistant, Dept. of Television, Radio, and Film
Syracuse University, 2009
Principal investigator: Dr. Michael Schoonmaker, Associate Professor
- Worked with Dr. Schoonmaker to review literature for his second book on media literacy and the use of digital video equipment in the classroom

Research Assistant, Dept. of Communications
Syracuse University, 2009
Principal investigator: Dr. T. Makana Chock, Associate Professor
- Cleaned and ran descriptive statistics on data sets collected using survey and physiological measures
- Trained graduate assistant on how to use SPSS data analysis software

SELECTED PROFESSIONAL EXPERIENCE

Videographer, editor, producer, S.I. Newhouse School of Public Communications
Syracuse University, Syracuse, NY, 2010 to 2011
- Created and edited a series of short videos showcasing the mass communications doctoral students at the school to be displayed on the school's website

Gallery intern, Warehouse Gallery
Syracuse, NY, August-December 2007
- Worked with local artists on the Gallery's video installments
- Responsible for maintaining press materials and drafting press releases

Programming assistant, Cleveland International Film Festival
Cleveland Film Society, Cleveland, OH, October 2006-June 2007
- Provide written critiques evaluating both feature and short submissions, recommending certain ones for Festival screenings
- Management of scheduling, reception and delivery of Festival films

SERVICE

EDITORIAL REVIEW

Public Opinion Quarterly, 2012 to present
Communication Research, 2012 to present
- Review manuscripts and provide editorial feedback on submissions to journals

COMMITTEE WORK

Newhouse social media assistant/associate professor search committee
Department of Communications, Syracuse University, November 2010 - April 2011
- Responsible for representing the doctoral program in selecting, interviewing, and hosting applicants for the position, resulting in the successful hiring of a candidate

Newhouse endowed chair search committee
Department of Communications, Syracuse University, November 2009 - March 2010

- Responsible for representing the doctoral program in selecting, interviewing, and hosting applicants for the position, resulting in the successful hire of a candidate

STUDENT ORGANIZATIONS

President, Newhouse Doctoral Student Organization
Newhouse School, Syracuse University, August 2009 - July 2010
- Elected president by doctoral students
- Organized social and networking opportunities for doctoral students on and off campus
- Responsible for helping to appoint doctoral students to various committees

HONORS & AWARDS

- Michael Shoenecke Grant, Popular Culture Association
- Creative Research Grant, Syracuse University
- President, Newhouse Doctoral Student Organization
- Graduate School Master's Prize, Syracuse University
- Award for Social Justice and Gender Diversity, Baldwin-Wallace College
- Presidential Scholarship, Baldwin-Wallace College

PROFESSIONAL DEVELOPMENT

Future Professoriate Program, Syracuse University, 2009 TO 2010
- Participant in monthly meetings designed to provide professorial training to doctoral students on a variety of issues, such as academic integrity, effectively presenting materials, research, and service

Transnationalizing LGBT Studies, Syracuse University, 2010
- Attended a conference on the importance of transnationalizing LGBT studies and thinking about how we teach LGBT studies

White Eagle Conference, Syracuse University, 2010
- Attended a weekend-long multidisciplinary conference on higher education, participating in teaching workshops dealing with such issues as technology use in the classroom, publishing, and thinking about the nature of higher education learning

Doing Queer Studies Now Doctoral Seminar, Wayne State University, 2009
- Selected to attend an all-expenses paid three-day conference on the nature of conducting queer studies inside the academy
- Attended daily sessions with keynote speaker Amy Villarejo, Associate Professor of Film and Gender & Sexuality Studies, Cornell University

AFFILIATIONS

- Association for Education in Journalism & Mass Communication
- International Communication Association
- National Communication Association
- Popular Culture Association
- Society for Cinema and Media Studies

TECHNICAL EXPERTISE

RESEARCH DESIGN & EXECUTION
- Media Lab
- BioPac
- Survery Gizmo

RESEARCH ANALYSIS & STATISTICS
- SAS
- SPSS/Amos
- QSR NVivo,
- SQL

CREATIVE
- Adobe Creative Suite
- Final Cut Studio

EDITING & CLERICAL
- Microsoft Office Suite
- Windows 98+
- MacOS 9+
- HTML

LANGUAGES

- French (fluency)
- Spanish (oral, written)